LAS CRUCES DISTRICT WILDERNESS FINAL ENVIRONMENTAL ASSESSMENT

VOLUME 1

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LAS CRUCES DISTRICT OFFICE
AUGUST 1984

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NOTICE

This document is to be used as part of the Bureau of Land Management's New Mexico Statewide Wilderness Study Process. Because a limited number of copies of this document are available, please retain this copy for future use.

United States Department of the Interior

8500

BUREAU OF LAND MANAGEMENT
LAS CRUCES DISTRICT OFFICE
P.O. Box 1420
Las Cruces, New Mexico 88001

Dear Interested Party:

This document is the Final Environmental Assessment (EA) for 26 Bureau of Land Management (BLM) Wilderness Study Areas (WSAs) in the Las Cruces District. Preliminary wilderness suitability recommendations for these WSAs were previously released for public comment in four draft documents: the Draft Environmental Assessment Wilderness Study Areas in the Las Cruces District (March 1983), the Socorro District Wilderness Draft Environmental Assessment (March 1983), the New Mexico Wilderness Supplemental Draft Environmental Assessment (August 1983), and the Las Cruces District Wilderness Supplemental Draft Environmental Assessment (May 1984).

The District Manager's recommendations displayed in this Final EA are based on the Area Managers' recommendations presented in the Draft EAs, public comments on the Draft EAs, and any additional resource information obtained during finalization of the site-specific Wilderness Analysis Reports (WARs) for each WSA.

The information presented in this Final EA will serve as the data base for the Las Cruces District's WSAs addressed in the BLM New Mexico Statewide Wilderness Environmental Impact Statement (EIS). The EIS will include the wilderness suitability recommendations of the BLM New Mexico State Director. Preparation of the EIS is scheduled to begin in the Fall of 1984.

This Final EA (Volume 1) will be available to the public throughout the scoping process to assist in the identification of significant issues to be addressed in the EIS. Volume 2 contains the appendices to this Final EA; the WARs for each WSA. Because of the size of this document, Volume 2 will not be distributed to everyone on the mailing list. If you would like a copy of Volume 2, please contact this office at the above address.

Sincerely yours,

/s/ Daniel C. B. Rathbun

Daniel C. B. Rathbun
District Manager

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CHAPTER 1
PURPOSE AND NEED

INTRODUCTION

This document is the Final Environmental Assessment (EA) for 26 Wilderness Study Areas (WSAs) in the Las Cruces District. Preliminary recommendations for these WSAs were released for public comment in four documents: Draft Environmental Assessment Wilderness Study Areas in the Las Cruces District (March 1983), Socorro District Wilderness Draft Environmental Assessment (March 1983), New Mexico Wilderness Supplemental Draft Environmental Assessment (August 1983), and Las Cruces District Wilderness Supplemental Draft Environmental Assessment (May 1984). Table 1-1 identifies which Las Cruces District WSAs were discussed in each of the draft documents.

The New Mexico BLM has modified its administrative boundaries since the Draft EAs were released. The modification had several effects, including moving some WSAs to the jurisdiction of a different Resource Area or District and changing Socorro from a District to a Resource Area. (Most of the old Socorro District is now a Resource Area administered by the Las Cruces District. The remaining portion is administered by the Albuquerque District.) As a result of this change, only three District Final EAs will be prepared.

This Final EA contains the District Manager's wilderness suitability recommendations for all of the Las Cruces District's WSAs which were discussed in the previously mentioned Draft EAs.

NEED FOR THE PROPOSAL

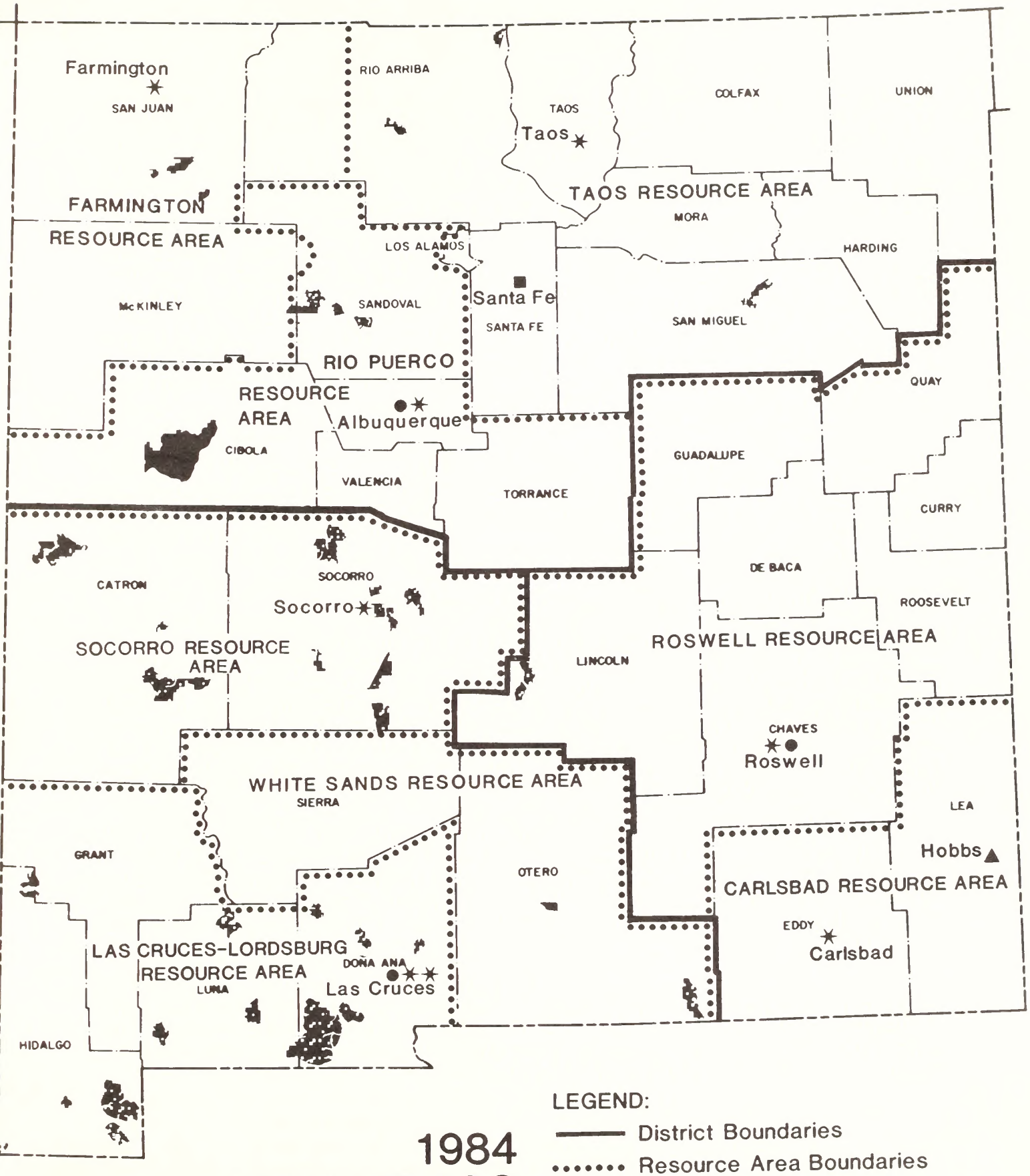
The Federal Land Policy and Management Act (FLPMA) of 1976 mandated the BLM to examine the wilderness potential of certain areas of public land. The wilderness review provision of the FLPMA, Section 603, directs the BLM to conduct an inventory to identify all roadless areas of 5,000 acres or more that have wilderness characteristics. These areas are called Wilderness Study Areas (WSAs). Once WSAs have been identified, they are studied through BLM's planning system to determine whether each is suitable for preservation as wilderness or is more suitable for other uses. The findings of these studies lead to recommendations, through the Secretary of the Interior and the President, to Congress. Only Congress has the authority to designate wilderness.

THE BLM NEW MEXICO WILDERNESS STUDY PLANNING PROCESS

In New Mexico, 37 WSAs are being studied simultaneously as part of a statewide planning process. (See Map 1-1 for WSAs in New Mexico.) In

TABLE 1-1
LAS CRUCES DISTRICT WILDERNESS STUDY AREAS DISCUSSED IN THE DRAFT DOCUMENTS

Area Name	Area Number	Draft Environmental Assessment Wilderness Study Areas in the Las Cruces District (March 1983)	Socorro District Wilderness Draft Environmental Assessment (March 1983)	New Mexico Supplemental Draft Environmental Assessment (August 1983)	Las Cruces District Wilderness Supplemental Draft Environmental Assessment (May 1984)
Las Cruces/Lordsburg Resource Area					
Aden Lava Flow	NM-030-053			X	
Alamo Hueco Mountains	NM-030-038			X	
Big Hatchet Mountains	NM-030-035			X	
Blue Creek	NM-030-026	X			
Cedar Mountains	NM-030-042	X			
Cooke's Range	NM-030-031	X			
Cowboy Spring	NM-030-007	X			
Florida Mountains	NM-030-034				X
Gila Lower Box	NM-030-023	X			
Las Uvas Mountains	NM-030-065	X			
Organ Mountains	NM-030-074	X			
Robledo Mountains	NM-030-063	X			
West Potrillo Mountains and Mount Riley	NM-030-052			X	
Socorro Resource Area					
Antelope	NM-020-053				X
Continental Divide	NM-020-044		X		
Devil's Backbone	NM-020-047		X		
Eagle Peak	NM-020-019			X	
Horse Mountain	NM-020-043		X		
Jornada del Muerto	NM-020-055		X		
Mesita Blanca	NM-020-018			X	
Presilla	NM-020-037				X
Sierra de las Canas	NM-020-038		X		
Sierra Ladrones	NM-020-016		X		
Stallion	NM-020-040		X		
Veranito	NM-020-035		X		
White Sands Resource Area					
Brokeoff Mountains	NM-030-112	X			



1984 NEW MEXICO BUREAU OF LAND MANAGEMENT

LEGEND:

- District Boundaries
- Resource Area Boundaries
- ■ State Office
- ● District Office
- ✶ Resource Area Office
- ▲ Satellite Office

MAP 1-1

accordance with BLM planning regulations, the Category III Management Framework Plan (MFP) Amendment process is being followed. The process provides for site-specific analysis through preparation of WSA specific Wilderness Analysis Reports (WARs) and District EAs which summarize the WARs. Information presented in these documents will form the data base for a Statewide Wilderness Environmental Impact Statement (EIS).

The Draft EIS will summarize cumulative impacts and include the recommendations of the BLM New Mexico State Director. These recommendations will be based upon the District and Area Managers' recommendations and any new information, including public comment. The State Director's recommendations will take into account the BLM Wilderness Study Criterion which requires consideration of the extent to which wilderness designation of each area under study would contribute to expanding the diversity of the National Wilderness Preservation System.

After public comment and subsequent revisions, a Final EIS and Wilderness Study Reports will be prepared. Recommendations will be made through the Secretary of the Interior to the President, followed by Congressional action. The District Final EA, the Statewide EIS, and subsequent decisions in conjunction with Congressional actions will serve to amend current MFPs.

WILDERNESS STUDY AREAS IN THE LAS CRUCES DISTRICT

The Las Cruces District is divided into three Resource Areas: the Las Cruces/Lordsburg Resource Area (LCLRA), the Socorro Resource Area (SRA), and the White Sands Resource Area (WSRA). As a result of the wilderness inventory process, subsequent policy decisions, and Interior Board of Land Appeals (IBLA) rulings, 27 WSAs have been identified in these three Resource Areas. The WSAs in the Las Cruces District are listed by Resource Area on Table 1-2. Maps 1-1 and 1-2 show the general locations of the three Resource Areas and the 27 WSAs.

One WSA in the WSRA, Culp Canyon, is not included in this Final EA. Wilderness study of Culp Canyon has been deferred because it is located in the northern part of the Army-controlled McGregor Range. Currently, legislation is being proposed to withdraw McGregor Range for military uses. Future wilderness study of Culp Canyon is dependent on the restrictions and boundaries of the final withdrawal.

The WSAs in the Las Cruces District were studied to determine their suitability for wilderness designation. The results of that study are documented in WARs. Appendices A through Z contain the WARs summarized in this Final EA. Summaries of the discussions in the WARs are presented in Tables 2-2, 3-1, 3-2, and 4-1 of this Final EA.

TABLE 1-2
WILDERNESS STUDY AREAS IN THE LAS CRUCES DISTRICT

Area Name	Area Number	Acreage[a/]
Las Cruces/Lordsburg Resource Area		
Aden Lava Flow	NM-030-053	23,857
Alamo Hueco Mountains	NM-030-038	10,796
Big Hatchet Mountains	NM-030-035	58,014
Blue Creek	NM-030-026	14,896
Cedar Mountains	NM-030-042	14,911
Cooke's Range	NM-030-031	19,608
Cowboy Spring	NM-030-007	6,699
Florida Mountains	NM-030-034	22,336
Gila Lower Box	NM-030-023	8,555
Las Uvas Mountains	NM-030-065	11,067
Organ Mountains	NM-030-074	7,144
Robledo Mountains	NM-030-063	12,811
West Potrillo Mountains and Mount Riley	NM-030-052	155,105
Socorro Resource Area		
Antelope	NM-020-053	20,710
Continental Divide	NM-020-044	68,761
Devil's Backbone	NM-020-047	8,904
Eagle Peak	NM-020-019	32,748
Horse Mountain	NM-020-043	5,032
Jornada del Muerto	NM-020-055	31,147
Mesita Blanca	NM-020-018	16,429
Presilla	NM-020-037	8,680
Sierra de las Canas	NM-020-038	12,838
Sierra Ladrones	NM-020-016	42,688
Stallion	NM-020-040	24,238
Veranito	NM-020-035	7,206
White Sands Resource Area		
Brokeoff Mountains	NM-030-112	31,386
*Culp Canyon	NM-030-152	10,937

Source: BLM, Las Cruces District Office Files, 1983 (revised 1984).

Notes: * This WSA is not addressed in this Final Environmental Assessment.

a/The acreages shown are approximate and reflect corrections made during the wilderness study; therefore, these acreages differ from the acreages published in the New Mexico Wilderness Study Area Decisions (November 1980).

MAP 1-2

WILDERNESS STUDY AREAS IN THE LAS CRUCES DISTRICT

RESOURCE AREA BOUNDARIES

WILDERNESS STUDY AREAS (WSA)

SOCORRO RESOURCE AREA

CATRON

SOCORRO

WHITE SANDS RESOURCE AREA

SIERRA

GRANT

OTERO

LAS CRUCES/LORDSBURG RESOURCE AREA

DONA ANA

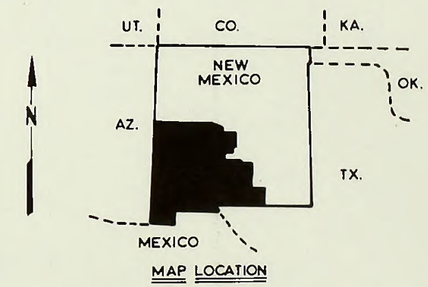
LUNA

HIDALGO

GUADALUPE CANYON (ISA)

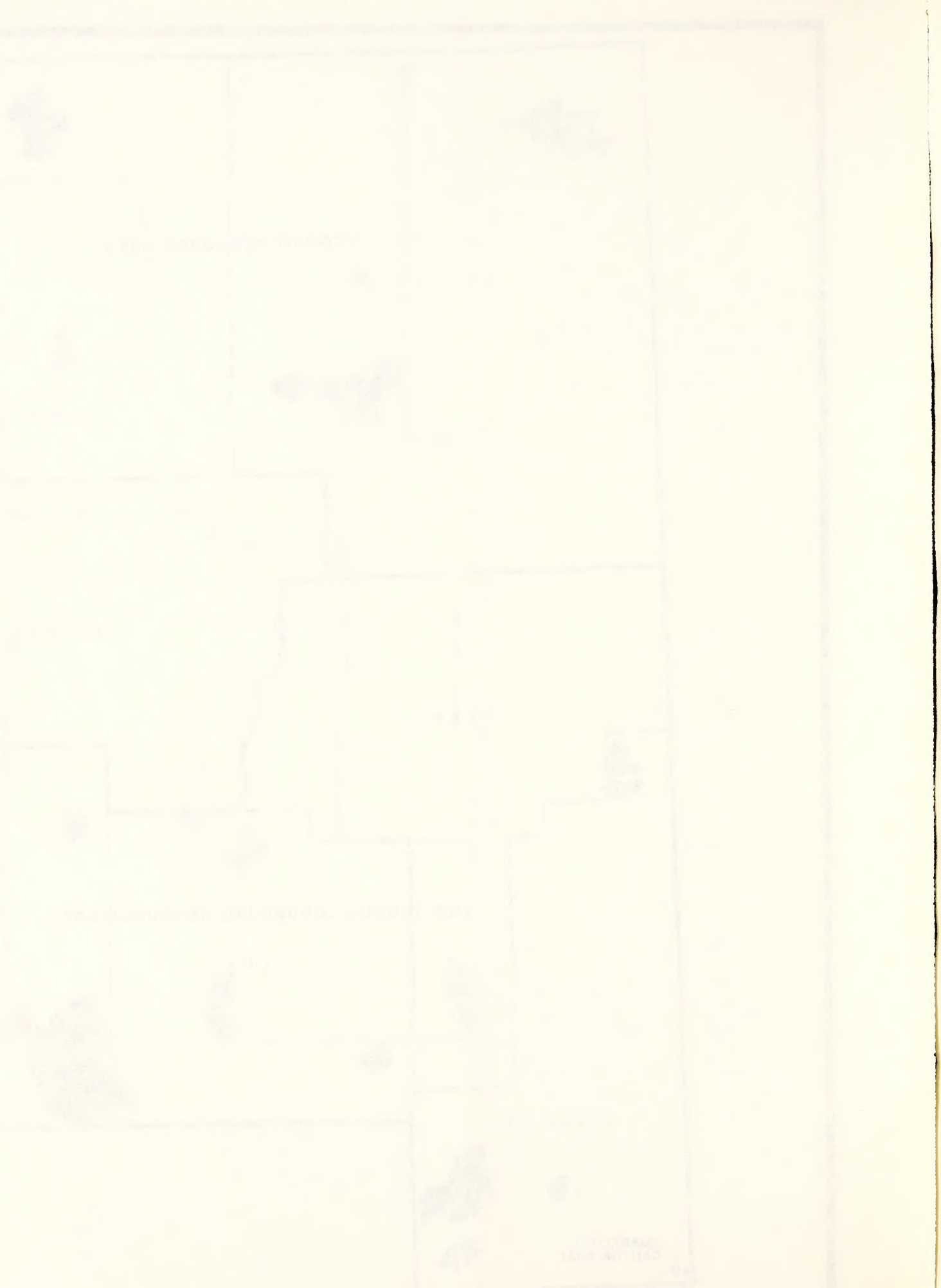
10 0 10 20 30 40

Scale in miles



MAP LOCATION

SOURCE: BLM Las Cruces District Files.1984



CHAPTER 2
ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE

ALTERNATIVES

For each Wilderness Study Area (WSA), an All Wilderness Alternative and No Action (No Wilderness) Alternative were evaluated. The All Wilderness Alternative analyzes the environmental consequences resulting from wilderness designation of the entire WSA. The No Action (No Wilderness) Alternative analyzes management of the WSA in accordance with the current BLM land use plans that would be in effect without wilderness designation. Current land use plans for each WSA in the Las Cruces District are shown in Table 2-1.

For some of the WSAs, an Amended Boundary Alternative was evaluated. This alternative represents designating a portion of the WSA wilderness. The remaining part of the WSA would be managed in accordance with existing BLM land use plans. The Amended Boundary Alternative was evaluated where (1) an opportunity exists to reduce conflicts between wilderness and other resource uses or (2) an opportunity exists to improve the long-term manageability of the area as wilderness. Non-Federal inholdings or non-Federal lands adjacent to the WSA, valid existing rights, man-made features, and boundary configuration were considered in evaluating manageability.

The alternatives analyzed for each WSA are displayed in Table 2-2.

PREFERRED ALTERNATIVES

The Preferred Alternative for each WSA is indicated on Table 2-2. The Preferred Alternative represents the recommendations made by the District Manager. Detailed discussions of these alternatives are included in the Wilderness Analysis Reports (WARs) which appear in Appendices A through Z (Volume 2 of the Final Environmental Assessment).

ALTERNATIVES CONSIDERED BUT NOT ANALYZED

Las Cruces/Lordsburg Resource Area

Aden Lava Flow

An Amended Boundary Alternative was considered during the initial preparation of the WAR for the Aden Lava Flow WSA. Under this alternative, split estate lands (Federal surface/non-Federal subsurface) would have been excluded from that portion of the WSA recommended suitable for wilderness designation to improve manageability. However, the Secretary's Policy Announcement of December 1982, resulted in the deletion of split estate

TABLE 2-1
LAS CRUCES DISTRICT LAND USE PLANS

WSA Name	WSA Number	Current Land Use Plan
Las Cruces/Lordsburg Resource Area		
Aden Lava Flow	NM-030-053	Southern Rio Grande MFP (1981) Southern Rio Grande Grazing EIS (1981) LC/L MFP Amendment/EIS (1983)
Alamo Hueco Mountains	NM-030-038	LC/L MFP Amendment/EIS (1983)
Big Hatchet Mountains	NM-030-035	LC/L MFP Amendment/EIS (1983)
Blue Creek	NM-030-026	Gila MFP (1977) LC/L MFP Amendment/EIS (1983)
Cedar Mountains	NM-030-042	LC/L MFP Amendment/EIS (1983)
Cooke's Range	NM-030-031	LC/L MFP Amendment/EIS (1983)
Cowboy Spring	NM-030-007	Gila MFP (1977) LC/L MFP Amendment/EIS (1983)
Florida Mountains	NM-030-034	LC/L MFP Amendment/EIS (1983)
Gila Lower Box	NM-030-023	Gila MFP (1977) LC/L MFP Amendment/EIS (1983)
Las Uvas Mountains	NM-030-065	Southern Rio Grande MFP (1981) Southern Rio Grande Grazing EIS (1981) LC/L MFP Amendment/EIS (1983)
Organ Mountains	NM-030-074	Southern Rio Grande MFP (1981) Southern Rio Grande Grazing EIS (1981) LC/L MFP Amendment/EIS (1983)
Robledo Mountains	NM-030-063	Southern Rio Grande MFP (1981) Southern Rio Grande Grazing EIS (1981) LC/L MFP Amendment/EIS (1983)
West Potrillo Mountains and Mount Riley	NM-030-052	Southern Rio Grande MFP (1981) Southern Rio Grande Grazing EIS (1981) LC/L MFP Amendment/EIS (1983)
Socorro Resource Area		
Antelope	NM-020-053	Stallion MFP (1975) East Socorro Grazing EIS (1979)

TABLE 2-1 (concluded)
LAS CRUCES DISTRICT LAND USE PLANS

WSA Name	WSA Number	Current Land Use Plan
	Socorro Resource Area (continued)	
Continental Divide	NM-020-044	West Socorro Rangeland Management Program EIS (1982) Divide MFP (1983)
Devil's Backbone	NM-020-047	Stallion MFP (1975) East Socorro Grazing EIS (1979)
Eagle Peak	NM-020-019	West Socorro Rangeland Management Program EIS (1982) Divide MFP (1983)
Horse Mountain	NM-020-043	West Socorro Rangeland Management Program EIS (1982) Divide MFP (1983)
Jornada del Muerto	NM-020-055	Stallion MFP (1975) East Socorro Grazing EIS (1979) Southern Rio Grande MFP (1981) Southern Rio Grande Grazing EIS (1981)
Mesita Blanca	NM-020-018	West Socorro Rangeland Management Program EIS (1982) Divide MFP (1983)
Presilla	NM-020-037	Stallion MFP (1975) East Socorro Grazing EIS (1979)
Sierra de las Canas	NM-020-038	Stallion MFP (1975) East Socorro Grazing EIS (1979)
Sierra Ladrones	NM-020-016	Ladron MFP (1976) East Socorro Grazing EIS (1979)
Stallion	NM-020-040	Stallion MFP (1975) East Socorro Grazing EIS (1979)
Veranito	NM-020-035	Stallion MFP (1975) East Socorro Grazing EIS (1979)
	White Sands Resource Area	
Brokeoff Mountains	NM-030-112	Mesa MFP (1974)

Source: BLM Las Cruces District Office Files, 1982, 1984.

TABLE 2-2
SUMMARY OF ALTERNATIVES[a]

WSA/Acres	Preferred Alternative	All Wilderness	Amended Boundary	No Action (No Wilderness--Manage Under Existing Land Use Plans)[b]	No Wilderness (Amend Existing Land Use Plans[b]
		LAS CRUCES/LORDSBURG RESOURCE AREA			
Aden Lava Flow NM-030-053 23,857 acres	Recommend 23,857 acres suitable for wilderness designation.	Same as the Preferred Alternative.	N/A	Recommend 23,857 acres nonsuitable for wilderness designation.	N/A
Alamo Hueco Mountains NM-030-038 10,796 acres	Recommend 10,796 acres nonsuitable for wilderness designation.	Recommend 10,796 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Big Hatchet Mountains NM-030-035 58,014 acres	Recommend 41,293 acres suitable for wilderness designation and 16,721 acres nonsuitable for wilderness designation.	Recommend 58,014 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 58,014 acres nonsuitable for wilderness designation.	N/A
Blue Creek NM-030-026 14,896 acres	Recommend 14,896 acres nonsuitable for wilderness designation.	Recommend 14,896 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Cedar Mountains NM-030-042 14,911 acres	Recommend 14,911 acres nonsuitable for wilderness designation.	Recommend 14,911 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Cooke's Range NM-030-031 19,608 acres	Recommend 19,608 acres nonsuitable for wilderness designation.	Recommend 19,608 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Cowboy Spring NM-030-007 6,699 acres	Designate 6,699 acres as a Research Natural Area.[c]	Recommend 6,699 acres suitable for wilderness designation.	N/A	Recommend 6,699 acres nonsuitable for wilderness designation. Manage area under no special designation in accordance with the Gila MFP and LC/L MFP Amendment/ EIS.	Same as the Preferred Alternative.
Florida Mountains NM-030-034 22,336 acres	Recommend 22,336 acres nonsuitable for wilderness designation.	Recommend 22,336 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Gila Lower Box NM-030-023 8,555 acres	Recommend 5,835 acres suitable for wilderness designation. Recommend 2,720 acres nonsuitable for wilderness designation.	Recommend 8,555 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Manage 2,470 acres of the WSA as the Gila River Lower Box Riparian ACEC as prescribed in the LC/L MFP Amendment/EIS. Manage the remainder of the area as described in the Gila MFP.	N/A
Las Uvas Mountains NM-030-065 11,067 acres	Recommend 11,067 acres nonsuitable for wilderness designation.	Recommend 11,067 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A

TABLE 2-2 (continued)
SUMMARY OF ALTERNATIVES[a]

WSA/Acres	Preferred Alternative	All Wilderness	Amended Boundary	No Action (No Wilderness--Manage Under Existing Land Use Plans)[b]	No Wilderness (Amend Existing Land Use Plans[b]
		LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
Organ Mountains NM-030-074 7,144 acres	Recommend 7,144 acres suitable for wilderness designation.	Same as Preferred Alternative.	N/A	Manage 6,690 acres of the WSA as the Organ Mountains Scenic ACEC as prescribed in the LC/L MFP Amendment/EIS. The remaining acres would be managed in accordance with the SRG MFP and the LC/L MFP Amendment/EIS.	N/A
Robledo Mountains NM-030-063 12,811 acres	Recommend 12,811 acres nonsuitable for wilderness designation.	Recommend 12,811 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
West Potrillo Mountains and Mount Riley NM-030-052 155,105 acres	Recommend 147,100 acres suitable for wilderness designation and 8,005 acres as nonsuitable for wilderness designation.	Recommend 155,105 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 155,105 acres nonsuitable for wilderness designation.	N/A
		SOCORRO RESOURCE AREA			
Antelope NM-020-053 20,710 acres	Recommend 9,892 acres suitable for wilderness designation and 10,818 acres nonsuitable for wilderness designation.	Recommend 20,710 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 20,710 acres nonsuitable for wilderness designation.	N/A
Continental Divide NM-020-044 68,761 acres	Recommend 35,635 acres suitable for wilderness designation and 33,126 acres nonsuitable for wilderness designation[c]	Recommend 68,761 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 68,761 acres nonsuitable for wilderness designation.	N/A
Devil's Backbone NM-020-047 8,904 acres	Recommend 8,904 acres nonsuitable for wilderness designation.	Recommend 8,904 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Eagle Peak NM-020-019 32,748 acres	Recommend 32,748 acres nonsuitable for wilderness designation.	Recommend 32,748 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Horse Mountain NM-020-043 5,032 acres	Recommend 4,432 acres suitable for wilderness designation and 600 acres nonsuitable for wilderness designation.	Recommend 5,032 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 5,032 acres nonsuitable for wilderness designation.	N/A

TABLE 2-2 (concluded)
SUMMARY OF ALTERNATIVES[a/]

WSA/Acres	Preferred Alternative	All Wilderness	Amended Boundary	No Action (No Wilderness--Manage Under Existing Land Use Plans)[b/]	No Wilderness (Amend Existing Land Use Plans[b/]
		SOCORRO RESOURCE AREA (continued)			
Jornada del Muerto NM-020-055 31,147 acres	Recommend 31,147 acres suitable for wilderness designation.[c/]	Same as the Preferred Alternative.	N/A	Recommend 31,147 acres nonsuitable for wilderness designation.	N/A
Mesita Blanca NM-020-018 16,429 acres	Recommend 16,429 acres nonsuitable for wilderness designation.	Recommend 16,429 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Presilla NM-020-037 8,680 acres	Recommend 8,680 acres nonsuitable for wilderness designation.	Recommend 8,680 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Sierra de las Canas NM-020-038 12,838 acres	Recommend 12,798 acres suitable for wilderness designation and 40 acres nonsuitable for wilderness designation.	Recommend 12,838 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 12,838 acres nonsuitable for wilderness designation.	N/A
Sierra Ladrones NM-020-016 42,688 acres	Recommend 31,244 acres suitable for wilderness designation and 11,444 acres nonsuitable for wilderness designation.[c/]	Recommend 42,688 acres suitable for wilderness designation.	Same as the Preferred Alternative.	Recommend 42,688 acres nonsuitable for wilderness designation.	N/A
Stallion NM-020-044 24,238 acres	Recommend 24,238 acres nonsuitable for wilderness designation.	Recommend 24,238 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
Veranito NM-020-35 7,206 acres	Recommend 7,206 acres nonsuitable for wilderness designation.	Recommend 7,206 acres suitable for wilderness designation.	N/A	Same as the Preferred Alternative.	N/A
		WHITE SANDS RESOURCE AREA			
Brokeoff Mountains NM-030-112 31,386 acres	Recommend 31,386 acres nonsuitable for wilderness designation.	Recommend 31,386 acres suitable for wilderness designation.	Recommend 12,277 acres suitable for wilderness designation and 19,109 acres nonsuitable for wilderness designation.	Same as the Preferred Alternative.	N/A

Source: BLM, Las Cruces District Wilderness Analysis Reports, 1983, 1984.

Notes: a/See Wilderness Analysis Reports for more detailed discussions of alternatives for each WSA.
b/Existing Land Use Plans for each WSA are listed on Table 2-1.
c/Preferred Alternative in Final EA differs from Preferred Alternative in Draft EA.

lands from wilderness consideration and eliminated the need for analysis of the Amended Boundary Alternative.

Alamo Hueco Mountains

Two No Wilderness/Amend the Existing Land Use Plan Alternatives were considered for the Alamo Hueco Mountains WSA but were not analyzed. Under one of these alternatives, a part or all of the WSA would have been designated a Research Natural Area (RNA) as defined in 43 Code of Federal Regulations (CFR) 8223. The primary objective of the RNA would have been to preserve the existing plant and animal communities of the Alamo Hueco Mountains while allowing scientific research and use of the area for educational purposes. This alternative was not analyzed because certain management commitments made in the Big Hatchets-Alamo Huecos Habitat Management Plan (HMP), like predator control and vegetation manipulation, would be in direct conflict with the objectives for a RNA. Implementation of the HMP is already underway.

Under the other No Wilderness/Amend the Existing Land Use Plan Alternative considered for the Alamo Hueco Mountains, the area would have been designated an Area of Critical Environmental Concern (ACEC) for cultural resources. This alternative was not analyzed because it is not known exactly which cultural sites in the Alamo Hueco Mountains are on Federal lands and special protective management is not required at the present time.

Cooke's Range

During preparation of the Las Cruces/Lordsburg MFP Amendment/EIS (BLM 1983), the Cooke's Range was identified as a potential ACEC for visual resources. The mountain range meets the minimum required criteria for a potential ACEC because it rates high in scenic quality and relative scarcity. However, the total scenic resource (the mountain range) contains a significant amount of acreage in non-Federal ownership. Since the land status patterns of the Cooke's Range would significantly limit BLM's ability to protectively manage the total scenic resource, the area was eliminated from further consideration in the Las Cruces/Lordsburg MFP Amendment/EIS (BLM 1983) as an ACEC for visual resources.

Management of the Cooke's Range as an ACEC for visual resources could have been analyzed in the WAR under the No Wilderness/Amend the Existing Land Use Plan Alternative. However, since the land status situation has not changed, this alternative was not given further consideration in the preparation of the Cooke's Range WAR.

Another No Wilderness/Amend the Existing Land Use Plan Alternative was considered but not analyzed for the Cooke's Range WSA. Under this alternative, portions of the Cooke's Range WSA would have been designated "Recreation Lands" as provided in 43 CFR 2071. The objective of this designation would have been to identify for the public the special recreation opportunities and values in and around the Cooke's Range WSA. The Cooke's Range Recreation Lands could have included, in addition to portions of the WSA, the following areas outside the WSA: the Massacre Peak Petroglyphs Area, the Fort Cummings Recreation Area, portions of the remnant

Arizona Cypress population, and rockhounding areas around Fluorite Ridge. This alternative was not analyzed because most of the lands in the Cooke's Range are not classified pursuant to the now expired Classification and Multiple Use Act of 1964 and, therefore, do not meet the designation criterion under 43 CFR 2071.

Florida Mountains

During preparation of the Las Cruces/Lordsburg MFP Amendment/EIS (BLM 1983), the Florida Mountain range was identified as a potential ACEC for visual resources. The mountain range meets the minimum required criteria for a potential ACEC because it rates high in scenic quality and relative scarcity. However, the total scenic resource (the mountain range) contains a significant amount of acreage in non-Federal ownership. Since the land status patterns of the Florida Mountain range would significantly limit BLM's ability to protectively manage the total scenic resource, the area was eliminated from further consideration in the Las Cruces/Lordsburg MFP Amendment/EIS (BLM 1983) as an ACEC for visual resources.

Management of the Florida Mountains as an ACEC for visual resources could have been analyzed in the WAR under the No Wilderness/Amend the Existing Land Use Plan Alternative. However, since the land status situation has not changed, this alternative was not given further consideration in the preparation of the Florida Mountains WAR.

Organ Mountains

During the initial preparation of the Organ Mountains WAR, an Amended Boundary Alternative was considered that excluded split estate lands (Federal surface/non-Federal subsurface) from that portion of the WSA recommended suitable for wilderness designation. The objective of this alternative was to improve manageability. However, the Secretary's Policy Announcement of December 28, 1982, resulted in the deletion of split estate lands from wilderness consideration and eliminated the need for analysis of the Amended Boundary Alternative.

Socorro Resource Area

Presilla

During wilderness studies, an ACEC for visual resources was considered for the Presilla WSA. The WSA forms a portion of the scenic Rio Grande Valley. However, a substantial portion of the scenic valley is outside the WSA. During wilderness studies, it was determined that it would be more appropriate to consider the entire Valley's scenic resources during the next land use plan update rather than provide protection for a small portion of the resources.

CHAPTER 3
AFFECTED ENVIRONMENT

OVERVIEW OF THE LAS CRUCES DISTRICT

The Las Cruces District is located in southwestern and south-central New Mexico. The District consists of approximately 6.2 million acres of public land in 8 counties. The major land uses and social and economic conditions of each of the three Resource Areas in the District are briefly described in the following sections.

Las Cruces/Lordsburg Resource Area

The Las Cruces/Lordsburg Resource Area (LCLRA) includes Dona Ana, Luna, Grant, and Hidalgo Counties. The LCLRA contains 13 of the District's WSAs.

Major Land Uses

Public land uses in the LCLRA include livestock grazing, wildlife use, mining, and various desert recreation uses. Grazing is the predominant land use throughout the Resource Area. Significant mining activities occur in Grant and Hidalgo Counties. Minerals produced include gold, silver, copper, lead, zinc, building stone, and sand and gravel. The Phelps-Dodge Copper Smelter is located in the Playas Valley of Hidalgo County. There is no present production of petroleum, natural gas, uranium, or coal in the Resource Area.

Several areas in the Resource Area have high potential for geothermal energy. The greatest potential is associated with the Rio Grande Rift in Dona Ana County. The potential for direct use applications in the Las Cruces area is high. Several local industries are planning to develop geothermal resources for space and domestic water heating. New Mexico State University in the City of Las Cruces is currently utilizing geothermal energy for direct use applications. In Hidalgo County, two commercial greenhouses are being heated with hot water in the Animas Valley, southwest of the City of Lordsburg.

Outdoor recreation in the Resource Area consists of a wide range of sports and leisure-time activities. Outdoor recreation activities include sightseeing, picnicking, camping, backpacking, hiking, four-wheeling, trail-biking, birdwatching, rockclimbing, rockhounding, sport shooting, horseback riding, and hunting.

Social and Economic Conditions

Major trade and service centers for the 4-County area are the cities of Las Cruces, Silver City, Deming, and Lordsburg, New Mexico and El Paso, Texas.

Although population characteristics vary by county, all show growth between 1970 and 1980 (see Table 3-1). Population densities indicate that Luna, Hidalgo, and Grant Counties are generally rural. The major concentrations of people in the Resource Area are in Dona Ana County. The 1980 Census of Population identified Dona Ana County as one of two Standard Metropolitan Statistical Areas in New Mexico (U.S. Department of Commerce, Bureau of the Census 1982).

TABLE 3-1
POPULATION CHARACTERISTICS, 1980

County	Population		
	Number	Per Square Mile	Percent Change 1970-1980
Las Cruces/Lordsburg Resource Area			
Dona Ana	96,340	25.2	38.1%
Grant	26,204	6.6	18.9%
Hidalgo	6,049	1.8	27.8%
Luna	15,585	5.3	33.1%
Socorro Resource Area			
Catron	2,720	0.4	23.7%
Socorro	12,566	1.9	28.7%
White Sands Resource Area			
Otero	44,665	6.7	8.7%
Sierra	8,454	2.0	17.6%
STATE OF NEW MEXICO	1,302,894	10.7	28.1%

Source: U.S. Department of Commerce, Bureau of the Census, 1982.

Residents in the counties that are sparsely populated (Hidalgo, Luna, and Grant) exhibit attitudes and values typical of rural, ranch-oriented societies in the western United States. The rural character of the area is what some residents value most about their lifestyle. Specifically, they appreciate the western way of life, which includes among its components the following: small-town living with its customs of friendliness, neighborliness, and mutual aid; a love of the great outdoors; and adherence to traditional, conservative values (Mountain West Research 1975).

Although Dona Ana County also contains vast rural areas where residents tend to have the same rural attitudes and values as in the sparsely populated counties (Harbridge House, Inc. 1978), increased population pressures, the influence of the larger city, and tourism add a new element to the traditional rural perspective. Generally, residents of Dona Ana County (primarily in the City of Las Cruces) have migrated from

other communities for education and employment opportunities, bringing with them their different values.

Although the LCLRA is rich in culture and natural resources, the area is considered economically poor. Low per capita income, and housing, medical care, legal, and other human services, have been shown to be substandard. Agriculture, ranching, mining, and government have traditionally been the primary activities, with tourism becoming a recent addition.

The total per capita personal income in 1980 for each of the counties in the Resource Area was below the $7,878 per capita income for the State of New Mexico. In ranking the 32 counties in the State of New Mexico by total per capita personal income in 1980, Dona Ana County ranked 22 ($6,328), Luna County ranked 19 ($6,985), Grant County ranked 15 ($7,477), and Hidalgo County ranked 11 ($7,848) (U.S. Department of Commerce 1982).

Socorro Resource Area

The Socorro Resource Area (SRA) includes Socorro and Catron Counties and contains 12 of the District's WSAs.

Major Land Uses

Public land in the SRA is used for livestock grazing, mining, fuelwood products, scientific research, and various types of recreation.

Grazing is the predominant land use. Although significant mining activity for silver, copper, lead, zinc, iron, uranium, barite, and fluorite occurred in Socorro County in the past, current activities are generally limited to exploration. There is no present production of petroleum, natural gas, or coal in the Resource Area. It is anticipated, however, that coal leasing and development will occur in the western portion of the Resource Area in the closing decade of this century.

Scientific activities on public land in the Resource Area include research at archaeological sites and at the National Radio Observatory's Very Large Array, the world's largest radio telescope.

Outdoor recreation in the Resource Area includes a wide range of sports and leisure-time activities. General outdoor recreation includes sightseeing, picnicking, camping, backpacking, hiking, horseback riding, sport shooting, four-wheeling, and birdwatching, as well as more specialized activities such as caving, rockclimbing, rockhounding, and bird and big game hunting.

Social and Economic Conditions

This portion of west-central New Mexico is typically rural in nature and generally characterized by sparse population, low incomes, high unemployment, and a multicultural orientation influenced by a Spanish heritage.

The Cities of Socorro, Belen, Los Lunas, Grants, and Albuquerque, New Mexico are the major trade and service centers for the region.

The Resource Area is predominantly rural with the community of Socorro comprising the majority of the population. Population characteristics vary by county, but both Catron and Socorro Counties show growth over the decade 1970 to 1980 (see Table 3-1). Low population densities verify the rural character of the two Counties.

Most people living in the sparsely populated Resource Area are generally ranch oriented. The rural character of the area, with its open spaces, fresh air, and solitude, is highly valued, as are the personal freedom and independence it affords. The residents also value the lifestyle offered by the local communities, which is characterized by extensive acquaintances, a lack of urban problems, and a relaxed pace. Additionally, most residents feel the area is a good place to raise children, and they wish to maintain the status quo.

The City of Socorro (with a population of 7,173) is the focus of much of the social and economic activity of the Resource Area. The attitudes and perceptions of the residents of Socorro are, in many ways, similar to those of the surrounding rural areas. There is, however, a wide range of attitudes in the community due in large part to the faculty and 1,300 students of the New Mexico Institute of Mining and Technology. The presence of this highly regarded college and the research community associated with the Very Large Array, Langmuir Laboratory, and other research facilities combine with the multicultural character of Socorro to produce a highly diverse community. Much of the support for wilderness designation and environmental issues in general comes from the academic and research community.

Mineral exploration for scientific and development purposes is also highly valued by much of the academic community and by numerous mining claimants in the Socorro area.

Ranching, mining, government services, and tourism form the basis of the economy in the Resource Area. The area is considered economically poor.

The total per capita personal income in 1980 for the two Counties in the SRA was below the $7,878 per capita income for the State of New Mexico. In ranking the 32 counties in the State of New Mexico by total per capita personal income in 1980, Catron County ranked 29 ($5,171) and Socorro County ranked 28 ($5,366) (U.S. Department of Commerce 1982). This indicates that these counties are two of the State's lowest in per capita personal income. They are also low compared to other states in the Southwest region (except Utah) and in the United States.

White Sands Resource Area

The White Sands Resource Area (WSRA) includes Otero and Sierra Counties and contains two of the District's WSAs. Only one of these WSAs, the Brokeoff Mountains, is discussed in this EA.

Major Land Uses

Public land uses in the WSRA include livestock grazing, mining, and recreation.

Grazing is the predominant land use. Mining occurs in the Jarilla, Caballo, and Cuchillo Mountains and the foothills of the Black Range. There is no present production of energy minerals in the Resource Area.

Outdoor recreation in the Resource Area includes a wide range of activities. Off-road vehicle enthusiasts use the public land around the City of Alamogordo extensively for recreation during the cooler months of the year. Other significant activities include sightseeing, picnicking, rockhounding, camping, hiking, and hunting.

Social and Economic Conditions

Major trade and service centers for the 2-County area are the Cities of Alamogordo, Truth or Consequences, and Las Cruces, New Mexico, and El Paso and Dell City, Texas.

The Resource Area is predominantly rural with the Cities of Truth or Consequences and Alamogordo comprising the majority of the population. Although population characteristics vary by county, all show growth between 1970 and 1980 (see Table 3-1). Residents of the Counties exhibit traditional attitudes and values of agricultural societies, such as independence, friendliness, and the outdoors.

The attitudes in Alamogordo are a mixture of urban and rural beliefs. The growth in military employment and support services in Alamogordo has undermined the homogeneity of communities in the area. The major problems accompanying the increased diversity is social disintegration. Permanent bonds are generally not formed between newcomers and long-term residents. In addition, newcomers are more likely to be dissatisfied with local services and facilities such as schools and medical care.

Tourism and retirement are important in Truth or Consequences. Residents enjoy the lifestyle, natural beauty, neighborliness, and recreational opportunities as the most important aspects of living in the area.

The total per capita personal income in 1980 for Otero and Sierra Counties was below the $7,878 per capita income for the State of New Mexico. In ranking the 32 counties in the State of New Mexico by total per capita personal income in 1980, Otero ranked 20 ($6,920) and Sierra ranked 17 ($7,231) (U.S. Department of Commerce 1982).

WILDERNESS STUDY AREAS

Tables 3-2 and 3-3 summarize the affected environment and the existing and potential uses of each WSA.

TABLE 3-2
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA			
ADEN LAVA FLOW						
(1) Entire WSA -23,857 acres of public land	Volcanic craters, rough broken lava fields, and rolling sand dunes.	Extensive basalt lava flow with several craters. Small area of coppice dunes. Within Rio Grande Rift.	18,373 acres grass-mixed desert shrub malpais; 3,879 acres mesquite sandy; 1,261 acres creosote shallow sand; 344 acres grass-mixed desert shrub bottomland. Possible habitat for one Bureau sensitive plant species, one Federal candidate plant species, and two State of New Mexico plants of special concern.	Melanistic species, raptors, bats, valuable wildlife habitat.	One major paleontological site.	The WSA appears natural. Opportunities for solitude are outstanding. Opportunities for primitive and unconfined recreation are not outstanding.
(2) Portion Recommended Suitable Same as Entire WSA						
ALAMO HUECO MOUNTAINS						
(1) Entire WSA -10,796 acres of public land -200 acres of private inholdings	Highly eroded volcanic mountains characterized by mesas, vertical cliffs, and long canyons.	Fault block of layered volcanic flows. Dominated by high-angled faulting and jointing with possible sedimentary rocks underneath.	10,675 acres juniper-oak brush mountains; 25 acres creosote gravelly; 20 acres mixed desert shrub gravelly loam; 76 acres deciduous trees gravelly sand. Potential habitat for one Bureau sensitive plant species and one State of New Mexico plant of special concern.	Javelina, deer, mountain lion, raptor nesting. Desert bighorn sheep, coatimundi, thick billed kingbird, varied bunting, and giant spotted whiptail possibly seen in or near the WSA. The gray wolf may pass through the area.	Sites in and around WSA include camps and caves. The cave sites have been identified as eligible for the National Register of Historic Places.	The WSA appears natural and contains outstanding opportunities for solitude and primitive and unconfined recreation. Land ownership patterns limit recreational opportunities.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
BIG HATCHET MOUNTAINS						
(1) Entire WSA -58,014 acres of public land -1,920 acres of State inholdings -46 acres of private inholdings	Rugged and steep mountain range cut by numerous canyons. Surrounding the range are gently sloping alluvial fans. U-Bar Ridge located to southwest.	Fault block mountain with thick sections of Paleozoic sedimentary rocks.	28,752 acres pinyon-juniper mixed mountain shrub mountain; 26,166 acres creosote gravelly; 316 acres mixed desert shrub gravelly sand; 2,420 acres tobosa-tarbush clayey; 338 acres tobosa draws; 22 acres clayey mesquite sandy. One Bureau sensitive species, three State of New Mexico plants of special concern, two State sensitive species, and one Federal candidate species.	Diversity in soils, elevation, and vegetation provides a variety of habitat types. Habitat for mountain lion, raptors, bats, mule deer, javelina, and two State-listed endangered animal species, desert bighorn sheep, and Sonora mountain kingsnake. Federally-listed gray wolf may pass through the WSA.	Although there have been no systematic surveys, several small prehistoric sites have been reported in the area.	The WSA generally appears natural. The rugged topography, large size, and variety of resources provide outstanding opportunities for solitude and primitive and unconfined recreation.
(2) Portion Recommended Suitable -41,293 acres of public land -1,920 acres of State inholdings -46 acres of private inholdings	The rugged and steep mountain range. Elevations range from 4,300 feet to 8,366 feet.	Same as Entire WSA.	27,382 acres pinyon-juniper mixed mountain shrub mountain; 13,480 acres creosote gravelly; 316 acres mixed-desert shrub gravelly sand; 40 acres tobosa-tarbush clayey; 68 acres tobosa draws; 7 acres mesquite sandy. One Bureau sensitive species, three State of New Mexico plants of special concern, two State sensitive plant species, and one Federal candidate species.	Same as Entire WSA except area is less diverse.	Same as Entire WSA.	This portion of the WSA is especially natural. Opportunities for solitude and primitive and unconfined recreation are outstanding. This part of the WSA has the highest wilderness values and concentration of special features.
(3) Portion Recommended Nonsuitable -16,721 acres of public land	U-Bar ridge and portions of the alluvial fans surrounding the Big Hatchet Range. Elevations range from 4,300 feet to 5,585 feet.	U-Bar Ridge is a plunging syncline of limestone.	1,370 acres pinyon-juniper mixed mountain shrub mountain; 12,686 acres creosote gravelly; 2,380 acres tobosa-tarbush clayey; 270 acres tobosa draws; 15 acres mesquite sandy. One Bureau sensitive species, two State of New Mexico plants of special concern, two State sensitive species, and one Federal candidate species.	Less significant wildlife values than the Entire WSA.	No known sites.	This is the most unnatural portion of the range. The area includes several cherry-stemmed roads and rangeland developments. Opportunities for solitude and primitive and unconfined recreation are outstanding.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a]/

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
BLUE CREEK						
(1) Entire WSA -14,896 acres of public land -1,280 acres of State inholdings	Rolling hills and drainages towards Gila River, such as Blue Creek. Black Mountain is dominant feature.	Black Mountain is an uplifted volcanic fault block. Rhyolitic and latitic tuffs overlie older Tertiary volcanics.	7,128 acres of juniper-mixed mountain shrub mountain; 5,262 acres creosote malpais; 2,358 acres creosote breaks; 148 acres deciduous trees bottomland. Potential habitat for one Bureau sensitive plant species and one State of New Mexico plant of special concern.	Low numbers of mule deer and javelina. Little diversity	No known sites (result of lack of inventory rather than absence of sites).	Marginally meets naturalness criterion. Opportunities for solitude in southwest part of WSA impacted by outside sights and sounds. Although outstanding, opportunities for primitive recreation are impacted by land status and rangeland developments.
(2) Portion Recommended Suitable -0 acres						
CEDAR MOUNTAINS						
(1) Entire WSA -14,911 acres of public land	Cedar Mountains are essentially a northwest-southeast trending ridge with scattered intermittent peaks. Lower elevations are characterized by rolling, rounded hills and broad drainages.	Shallow Paleozoic marine sediments with a Tertiary volcanic cap of basalt.	6,099 acres mixed mountain shrub mountain; 7,599 acres creosote gravelly; 1,206 acres tobosa draws; 7 acres mixed mountain shrub gravelly sand. Potential habitat for one Bureau sensitive plant species and one State of New Mexico plant of special concern.	Low numbers of mule deer, javelina, possibly raptor nesting. Similar to other desert ranges.	Significant prehistoric sites.	Generally appears natural. Outstanding opportunities for solitude. Opportunities for primitive and unconfined recreation are not considered outstanding.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a]/

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
COOKE'S RANGE						
(1) Entire WSA -19,608 acres of public land -640 acres of State inholdings	Dominant feature is Cooke's Peak, which rises over 3,600 feet above surrounding plains. Steep walled canyons and ridges characterize the WSA.	Cooke's Range is a fault block composed of Precambrian granitic rocks and Paleozoic and Mesozoic sedimentary rocks intruded by a large granodiorite stock (Cooke's Peak).	13,899 acres pinyon-juniper mixed mountain shrub mountain; 3,068 acres creosote gravelly; 879 acres tobosa draws; 1,702 acres mixed desert shrub sandy; 60 acres mixed desert shrub gravelly sand. Potential habitat for one Bureau sensitive plant species, four State of New Mexico plants of special concern, and one Federally endangered species.	Diverse wildlife community with over 70 avifauna species. Raptors (golden eagle, red-tailed hawk, Cooper's hawk, great horned owl, prairie falcon) nest in or near WSA. Some mule deer and unusual reptiles.	Massacre Peak Petroglyph Site near Frying Pan Spring is one of most significant sites in Las Cruces District. Significant historical values along WSA boundary; Butterfield Trail, Fort Cummings, historic mining town of Cooke's.	High degree of apparent naturalness. Opportunities for solitude in south and southwest parts of WSA not outstanding due to lack of topographic screening. Diversity of primitive recreation opportunities.
(2) Portion Recommended Suitable -0 acres						
COWBOY SPRING						
(1) Entire WSA -6,699 acres of public land	Primarily rugged canyon and rough hilly country. Cowboy Rim is the dominant feature.	WSA lies within the Cowboy Rim Cauldron. Fault block of Tertiary volcanics consisting primarily of tuffs.	6,285 acres juniper-mixed mountain shrub mountain; 410 acres grass mountain; 4 acres mixed mountain shrub gravelly sand. Potential habitat for one Bureau sensitive plant species and one State of New Mexico plant of special concern.	Mountain lion, javelina, Coues' whitetail deer, golden eagles, Montezuma quail. Potential desert bighorn sheep transplant site. Potential for gray wolf, coatimundi, and Mexican turkey.	Three prehistoric sites.	High quality naturalness. Quality of opportunities for solitude and primitive recreation dependent on the vast undeveloped areas of surrounding Animas Mountains.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
FLORIDA MOUNTAINS						
(1) Entire WSA -22,336 acres of public land -80 acres of State inholdings -30 acres of private inholdings (patented mining claim)	North-south trending mountain range with steep canyons and near vertical cliffs. Florida, South, and Gym Peaks have elevations over 7,000 feet.	From Paleozoic through Mississippian time, area part of a stable shelf environment. In Pennsylvanian, Pedregosa Basin formed to the west and Floridas area remained topographic high. North-south block faulting during the Tertiary period created the present uplifted mountain range along boundary faults.	12,907 acres of grass-mixed desert shrub hills; 3,413 acres of snakeweed-mixed desert shrub-grass gravelly loam; 4,411 acres of creosote-grass gravelly; 1,289 acres of snakeweed-mesquite-yucca-other shrubs and trees sandy; and 316 acres of other shrubs and trees-mixed desert shrub gravelly sand. Potential habitat for one Bureau sensitive plant species and four State of New Mexico plants of special concern.	Special habitat features are springs, seeps, and cliffs. Prairie falcons, golden eagles, red-tailed hawks, great horned owls, and nesting birds typical of mixed shrub mountain communities. Mule deer, small javelina population, and large herd of introduced Persian ibex.	Two prehistoric sites (bedrock mortars and unusually large campsite).	Quality of naturalness in parts of WSA diminished by the cumulative impacts of rangeland developments and mining activity. Quality of outstanding solitude along east side of range diminished by cherry-stemmed roads, rangeland developments, and past mining activity. Solitude in southwest part and west central parts of WSA not outstanding due to lack of screening. Diversity of primitive recreation opportunities. Non-Federal lands slightly impact recreation opportunities.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
GILA LOWER BOX						
(1) Entire WSA -8,555 acres of public land -120 acres of private inholdings	Dominant feature is the Gila Lower Box Canyon with numerous side canyons and rolling hills to the south and west.	Extensive Tertiary volcanics with Quaternary stream terrace deposits.	2,138 acres grass hills; 3,167 acres creosote breaks; 2,583 acres mixed desert shrub loamy; 454 acres deciduous trees river bottomland; 80 acres creosote gravelly; 48 acres creosote sandy; 85 acres creosote malpais. Potential habitat for one Bureau sensitive plant species and one State of New Mexico plant of special concern.	Significant breeding area for raptors and other species of birds. Significant mammal, amphibian, and reptile habitat. Mule deer and javelina. Extremely diverse wildlife community. Habitat for Federal-endangered peregrine falcon and bald eagle. Habitat for 8 State endangered species: gray hawk, black hawk, Gila woodpecker, Bell's vireo, Gila monster, narrow-headed garter snake, spikedace, loachminnow. The zone-tailed hawk, a State special concern element, nests in the WSA.	Mogollon style petroglyph panels. Rock shelters and rock structures in the WSA are significant because such remains are rare in this part of the Southwest.	High quality naturalness. Outstanding opportunities for solitude in the Gila Lower Box Canyon and side canyons, and in rolling hills to the south. Solitude in the western and southwestern parts of the WSA is impacted by outside sights and sounds. High quality and wide diversity of primitive recreation opportunities.
(2) Portion Recommended Suitable -5,835 acres of public land -120 acres of private inholdings	Primarily the Gila Lower Box Canyon with numerous side canyons and the rolling hills to the south.	Same as Entire WSA.	2,073 acres grass hills; 1,755 acres creosote breaks; 1,402 acres mixed desert shrub loamy; 440 acres deciduous tree river bottomland; 80 acres creosote gravelly; 85 acres creosote malpais. One Bureau sensitive plant species and one State of New Mexico plant of special concern.	Same as Entire WSA.	Same as Entire WSA.	High quality naturalness and high quality opportunities for solitude and primitive recreation.
(3) Portion Recommended Nonsuitable -2,720 acres of public land	Rolling hills and drainages to the west and hills to the south.	Quaternary shallow lake and stream terrace deposits.	65 acres grass hills; 1,412 acres creosote breaks; 1,181 acres mixed desert shrub loamy; 14 acres deciduous trees river bottomland; 48 acres creosote sandy. One Bureau sensitive plant species and one State of New Mexico plant of special concern.	No significant wildlife values.	No known sites.	Apparently natural. Opportunities for solitude impacted by outside sights and sounds. Opportunities for primitive recreation not outstanding.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
LAS UVAS MOUNTAINS						
(1) Entire WSA -11,067 acres of public land -40 acres of private inholdings	Tilted volcanic rock with gentle slopes and cliffs, numerous mesas, buttes, and deep canyons.	Faulted domal uplift of Tertiary volcanic rocks lying within the Rio Grande Rift.	9,276 acres grass mountain; 1,791 acres creosote gravelly. Potential for one Bureau sensitive plant species and one State of New Mexico plant of special concern.	Raptors, quail, low mule deer numbers.	No known sites.	The area appears natural. Opportunities for solitude are outstanding. Opportunities for primitive and unconfined recreation are not outstanding.
(2) Portion Recommended Suitable -0 acres						
ORGAN MOUNTAINS						
(1) Entire WSA -7,144 acres of public land -40 acres of private inholdings	North-south trending mountain range with extremely rugged terrain, multitude of steep crevices, canyons, spires. The towering mountains are surrounded by pediments covered with boulders and alluvial fans.	Fault block of intrusive rock with minor Paleozoic sedimentary rocks. Within Rio Grande Rift.	163 acres Ponderosa pine mountain; 3,362 acres pinyon-juniper-mixed mountain shrub mountain; 3,501 acres mixed desert shrub gravelly loam; 118 acres mixed desert shrub sandy. Possible habitat for three Bureau sensitive plant species, four State of New Mexico plants of special concern, and one State sensitive plant species.	Variety in wildlife habitat and wildlife including eagles, falcons, hawks, owls, smaller birds, ringtail cats, rock rattlesnakes, mule deer, mountain lions, and the State endangered Trans-Pecos rat snake. State endangered desert bighorn sheep and Federally endangered peregrine falcon may occur.	No known prehistoric sites. Historic associations with the Civil War.	The area appears natural. The major topographic features remain unaffected by the works of man. Opportunities for solitude and primitive and unconfined recreation are outstanding. Rock climbing opportunities are Nationally significant.
(2) Portion Recommended Suitable Same as Entire WSA.						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a]/

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			LAS CRUCES/LORDSBURG RESOURCE AREA (concluded)			
ROBLEDO MOUNTAINS						
(1) Entire WSA -12,811 acres of public land	North-south trending chain of rugged volcanic mountains.	Fault block of Paleozoic sedimentary rocks with rhyolite intrusion and minor volcanics. Within the Rio Grande Rift.	8,925 acres grass-mixed desert shrub mountain; 2,688 acres creosote gravelly; 1,198 acres mixed desert shrub gravelly sand. One Bureau sensitive plant species and one State of New Mexico plant of special concern.	Bats, eagles and other raptors. Variety of small birds. Low mule deer populations. Trans-Pecos rat snake. Bald eagles, peregrine falcons may stop in the area during migration.	20 known sites which include pit houses, small caves, and a pueblo.	The area appears natural. Opportunities for solitude are outstanding. Opportunities for primitive and unconfined recreation are not outstanding.
(2) Portion Recommended Suitable -0 acres						
WEST POTRILLO MOUNTAINS AND MOUNT RILEY						
(1) Entire WSA -155,105 acres of public land -12,051 acres of State inholdings -640 acres of split estate inholdings	A wide variety of terrain including over 48 cinder cones, sand dunes, and playas.	Extensive basalt flows and cinder cones. Mountain peaks of intrusive rhyolite. Within Rio Grande Rift.	52,539 acres creosote malpais; 46,391 acres creosote-mixed desert shrub gravelly/shallow sands; 14,781 acres creosote-mixed desert shrub-grass hills; 36,165 acres mesquite sandy; 5,229 acres mixed desert shrub-tobosa. One Bureau sensitive plant species and one State of New Mexico plant of special concern.	Different habitat types support a diversity of wildlife species. Wintering raptors. Low mule deer population. Waterfowl can be found in Indian Basin during the wet season. Peregrine falcons have been seen in the area (nonresident).	Significant cultural resources include classic Mimbres sites.	The WSA appears natural. Opportunities for solitude and primitive and unconfined recreation are outstanding.
(2) Portion Recommended Suitable -147,100 acres of public land -11,411 acres of State inholdings -640 acres of split estate inholdings	Same as Entire WSA.	Same as Entire WSA.	51,607 acres creosote malpais; 44,140 acres creosote-mixed desert shrub gravelly/shallow sands; 12,468 acres creosote mixed desert shrub grass hills; 33,691 acres mesquite sandy; 5,194 acres mixed desert shrub-tobosa.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.
(3) Portion Recommended Nonsuitable -8,005 acres of public land	Several cinder cones, sand dunes, and playas.	Basalt flows and cinder cones. Within Rio Grande Rift.	932 acres creosote malpais; 2,251 acres creosote-mixed desert shrub gravelly and shallow sands; 2,313 acres creosote mixed desert shrub grass hills; 2,474 acres mesquite sandy; 35 acres mixed desert shrub-tobosa.	No significant wildlife values.	One known site--small El Paso phase hamlet.	Naturalness is degraded by cinder mining operations.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA			
ANTELOPE						
(1) Entire WSA -20,710 acres of public land -680 acres of State inholdings	Rolling desert prairie. Elevations range from 4,765 feet to 5,065 feet. Includes small portion of Little San Pasqual Mountain foothills.	Predominantly Tertiary valley-fill Santa Fe formation sediments in north part of WSA and Quaternary alluvium and bolson deposits in south part of WSA. Within Rio Grande Rift.	10,312 acres broom dalea deep sand and sandy; 5,022 acres sand sagebrush sandy; 1,637 acres creosote gravelly, loamy, and limestone hills; 1,631 acres mesquite sandy and loamy; 993 acres mid grass loamy; 836 acres yucca sandy; and 279 acres short grass sandy. Potential habitat for one State of New Mexico threatened (Federal candidate) plant species and two State of New Mexico plants of special concern.	Two Standard Habitat Sites (SHS's) support 155 wildlife species including 35 mammal species, 50 reptile and amphibian species, and 70 resident and migratory bird species.	Five recorded sites include lithic and ceramic scatters with hearths. Known unrecorded sites include Paleo-Indian site and Archaic sites.	Quality of naturalness diminished by rangeland developments and access routes within and adjacent to WSA. Expansive desert environment and low visitor use compensate for lack of screening. Quality reduced by configuration and traffic along boundary roads. Opportunities for primitive recreation not outstanding.
(2) Portion Recommended Suitable -9,892 acres of public land -40 acres of State inholdings	Rolling desert prairie.	Predominantly Tertiary valley-fill Santa Fe formation sediments within Rio Grande Rift.	7,366 acres broom dalea deep sand and sandy; 1,846 acres sand sagebrush sandy; and 680 acres mesquite sandy.	Same as Entire WSA.	Same as Entire WSA.	Natural opportunities for solitude are enhanced by expansive desert environment and low visitor use.
(3) Portion Recommended Nonsuitable -10,818 acres of public land	Rolling desert prairie. Includes portions of Little San Pasqual Mountain foothills.	Includes the southern and northern portions of the WSA.	3,176 acres sand sagebrush sandy; 2,946 acres broom dalea deep sand and sandy; 1,637 acres creosote gravelly, loamy, and limestone hills; 951 acres mesquite sandy and loamy; 993 acres mid grass loamy; 836 acres yucca sandy; and 279 acres short grass sandy. Potential habitat for threatened species same as Entire WSA.	Same as Entire WSA.	No known sites.	Quality of naturalness diminished by rangeland developments and access routes. Opportunities for solitude reduced by configuration and traffic along boundary roads.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
CONTINENTAL DIVIDE						
(1) Entire WSA -68,761 acres of public land -3,420 acres of State inholdings -1,680 acres of private inholdings	Topography ranges from smooth rolling grasslands to rugged canyons and rough hilly country. Elevations range from 6,785 feet to 9,212 feet.	Pelona Mountain is a composite strato-volcano. WSA is dominated by volcanics underlain at depth by sedimentary formations.	4,945 acres ponderosa-pinyon; 52,704 acres blue grama-snakeweed; 11,112 acres pinyon-juniper. Potential occurrence of 17 threatened or endangered plant species.	Three SHS's support approximately 309 wildlife species including 59 reptile and amphibian species, 175 resident and migratory bird species, and 75 mammal species including mule deer, pronghorn, mountain lion, and black bear. Bald eagle winter range. Potential habitat for black-footed ferret, peregrine falcon, and bald eagles.	One National Register site, Bat Cave. Existing information indicates additional cultural sites, but only limited inventory has been conducted.	High degree of naturalness. Excellent opportunities for solitude and primitive recreation. Diverse landforms and vegetation.
(2) Portion Recommended Suitable -35,635 acres of public land -1,920 acres of State inholdings -80 acres of private inholdings	Same as Entire WSA.	Same as Entire WSA.	4,274 acres ponderosa pine/Douglas fir; 10,771 acres pinyon-juniper woodland; and 20,590 acres grama-galleta steppe. Potential occurrence of 17 threatened or endangered plant species.	Same as Entire WSA.	Bat Cave is located within this portion of the WSA. Few additional sites presently known.	Same as Entire WSA.
(3) Portion Recommended Nonsuitable -33,126 acres of public land	Primarily smooth rolling grasslands.	Same as Entire WSA.	32,144 acres blue grama-snakeweed steppe; 341 acres pinyon-juniper; 641 acres ponderosa-pinyon.	Contains all three SHS's, but is predominantly pronghorn habitat.	Few cultural sites presently known.	Primarily a smooth rolling grassland. The extreme visibility in this area makes human impacts and uses more noticeable than in the forested portions of the WSA. Outstanding opportunities for solitude; few opportunities for primitive recreation.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
DEVIL'S BACKBONE						
(1) Entire WSA -8,904 acres of public land	Rugged and broken southern flank of Magdalena Mountains; rises precipitously out of surrounding desert grassland; culminates in sharp, knife-like ridges and stark, rocky peaks. Elevations range from 5,400 feet to 8,100 feet.	Mid-Tertiary volcanic rocks associated with cauldrons of the Mogollon-Datil Province.	3,904 acres grama-tobosa shrubsteppe; 4,000 acres grama-galleta steppe; 1,000 acres pinyon-juniper woodland. Potential occurrence for 11 threatened or endangered plant species.	Two SHS's support 194 wildlife species including 50 mammal species, 50 reptile and amphibian species, and 94 resident and migratory bird species. Representative wildlife includes mule deer, pronghorn, coyote, bobcat, fox, and possibly mountain lion. Good raptor habitat.	No known cultural sites. Site density projected to be low.	WSA is natural in appearance; naturalness impaired by livestock watering pipeline which bisects WSA. Southern half and extreme northern portion of WSA is highly natural. Opportunities for solitude are outstanding. Recreation opportunities are limited by difficult access and the character of the WSA.
(2) Portion Recommended Suitable -0 acres						
EAGLE PEAK						
(1) Entire WSA -32,748 acres of public land -80 acres of State inholdings -360 acres of private inholdings	Ranges from rolling hills and mesas to well-defined canyons and volcanic cinder cones. Elevations range from 6,400 feet to 7,550 feet.	Recent volcanic rocks overlie Tertiary and Cretaceous sediments.	20,570 acres pinyon-juniper hill; 10,100 acres blue grama-snakeweed hill; 2,078 acres Russian thistle-alkali sacaton valley. Potential occurrence of eight threatened or endangered plant species.	Three habitat types support 306 wildlife species including 57 reptile and amphibian species, 175 resident and migratory bird species, 74 mammal species including pronghorn and mule deer.	Sixty-three sites representing human habitation from archaic to historic times. Petroglyphs present in the WSA.	Naturalness and solitude reduced by evidence of human uses. Offers outstanding opportunities for primitive recreation.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
HORSE MOUNTAIN						
(1) Entire WSA -5,032 acres of public land	Isolated mountain surrounded by Plains of San Agustin. Elevations range from 6,990 feet to 9,490 feet.	Horse Mountain is a dissected strato-volcano of Tertiary age.	3,982 acres ponderosa/pinyon forest; 1,050 acres blue grama-snakeweed. Potential for 13 threatened or endangered plant species.	Two SHS's support 299 wildlife species including 53 reptile and amphibian species, 175 resident and migratory bird species, and 71 mammal species including mule deer, black bear, and mountain lion. Bald eagle winter range. Potential habitat for peregrine falcon and bald eagles.	No known sites. Low probability for undiscovered sites.	High degree of naturalness. Forested mountain environment has excellent opportunities for solitude and primitive recreation.
(2) Portion Recommended Suitable -4,432 acres of public land	Same as Entire WSA.	Same as Entire WSA.	3,982 acres ponderosa/pinyon forest; 450 acres blue grama-snakeweed. Potential for 13 threatened or endangered plant species.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.
(3) Portion Recommended Nonsuitable -600 acres of public land	Smooth plains at base of mountain.	Primarily basin fill.	600 acres blue grama-snakeweed. Potential for one threatened or endangered plant species.	One SHS supports in part 189 wildlife species including 40 reptile and amphibian species, 101 resident and migratory bird species, and 48 mammal species.	Same as Entire WSA.	This small area is fenced and bisected by a well-used vehicle route and lacks wilderness characteristics.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
JORNADA DEL MUERTO						
(1) Entire WSA -31,147 acres of public land -1,280 acres of State inholdings	A lava flow characterized by lava tubes, sink holes, pressure ridges, and related volcanic features; most of these structures have been silted in by fine wind blown sand and clay materials. Elevations range from 4,700 feet to 4,900 feet.	Basalt lava flow located near the geographic center of the Jornada del Muerto basin.	31,147 acres grama-tobosa shrubsteppe. Potential occurrence for one threatened or endangered plant species.	One SHS supports approximately 93 wildlife species including 24 mammal species, 31 reptile and amphibian species, and 38 resident and migratory bird species. Representative wildlife includes pronghorn, coyote, scaled quail, and songbirds.	No cultural sites recorded prior to wilderness study; one prehistoric site located during study. No inventory data.	WSA represents a fine example of lava-desert grassland; naturalness values are high. Solitude opportunities are exceptional. For the average individual, the WSA would likely prove unattractive for backcountry use.
(2) Portion Recommended Suitable Same as Entire WSA						
MESITA BLANCA						
(1) Entire WSA -16,429 acres of public land -160 acres of private inholdings	Rolling grassland broken by sandstone and basalt mesas. Red Hill Cinder Cone and Lava Flow are dominant features. Elevations range from 6,400 feet to 7,679 feet.	Recent volcanic rocks overlie Tertiary and Cretaceous sediments.	1,326 acres blue grama-snakeweed hill; 9,316 acres alkali sacaton-Russian thistle; 5,787 acres pinyon-juniper hill. Potential occurrence of eight threatened or endangered plant species.	Three habitat types support approximately 306 wildlife species including 57 reptile and amphibian species, 175 resident and migratory bird species, 74 mammal species including pronghorn and mule deer. Potential black-footed ferret habitat.	Fifty-three sites ranging from archaic to historic. Petroglyphs present in the WSA.	Naturalness and solitude reduced by evidence of human uses. Opportunities for primitive recreation not considered outstanding.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
PRESILLA						
(1) Entire WSA -8,680 acres of public land	Mesa benchlands and arroyos in west part of WSA. Limestone and sandstone hills in east. Also, areas with low granitic ridges, coppice dunes, and box canyons.	Located in the Socorro trough (a faulted, tectonic depression) and Rio Grande Rift. Late Tertiary valley-fill sediments of Santa Fe formation and Quaternary alluvium in west part of WSA and outcrops of Pennsylvanian age Madera limestone on exposures of Precambrian granite in east part of WSA.	7,403 acres of creosote gravelly, limestone hills, and igneous hills; 1,261 acres of desert shrub sandy; and 16 acres of pinyon-juniper limestone hills. Potential habitat for two State of New Mexico plants of special concern.	Two Standard Habitat Sites support 213 wildlife species including 27 mammal species, 41 reptile and amphibian species, and 145 resident and migratory bird species. Common wildlife species are coyotes, blacktailed jackrabbits, desert cottontails, mule deer, and various raptors and songbirds.	Seven known sites including small structures of unknown function and date, an archaic lithic scatter, a quarry, and a unique Piro pictograph site.	Quality of naturalness impacted by vehicle routes and mining activity. Good opportunities for solitude. Variety of landforms and cultural features provide opportunities for primitive recreation.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
SIERRA DE LAS CANAS						
(1) Entire WSA -12,838 acres of public land -160 acres private inholdings	Rugged desert mountain range; sheer rock escarpments, deep narrow canyons, mountain ridges, mesa tops, broken badlands, and isolated desert valleys. Elevations range from 5,100 feet to 6,200 feet.	Dominated by the fault zone of the Rio Grande Rift; forms portion of the highlands east of the Rio Grande and west of the Jornada del Muerto basin.	4,488 acres pinyon-juniper woodland; 8,350 acres grama-tobosa. Potential occurrence for 14 threatened or endangered plant species.	Five SHS's support approximately 238 wildlife species including 52 mammal species, 53 reptile and amphibian species, and 133 resident and migratory bird species. Representative wildlife includes mule deer, pronghorn, coyote, bobcat, scaled quail, and songbirds. Good raptor habitat. Potential peregrine falcon habitat.	Eight recorded cultural sites; petroglyphs in WSA. Most of the WSA is uninventoried.	WSA represents one of New Mexico's least disturbed upper Chihuahuan Desert ecosystems; naturalness values are very high. Solitude and primitive recreation opportunities are outstanding; located in close proximity to Socorro.
(2) Portion Recommended Suitable -12,798 acres of public land	Same as Entire WSA.	Same as Entire WSA.	4,448 acres pinyon-juniper woodland; 8,350 acres grama-tobosa. Threatened or endangered plant species same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA except access corridor provided to private inholding.
(3) Portion Recommended Nonsuitable -40 acres of public land	Badlands area.	Same as Entire WSA.	40 acres pinyon-juniper woodland. Potential occurrence for threatened or endangered species reduced by small size of the area.	Characterized by one SHS.	No recorded cultural sites; area is uninventoried.	Badlands area; no human intrusions.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (continued)			
SIERRA LADRONES						
(1) Entire WSA -42,688 acres of public land -373 acres of private inholdings -1,960 acres of State inholdings	Isolated desert mountain range; topography includes massive rock escarpments, serrated mountain peaks, badlands, box canyons, mesa benchlands, and rolling hills. Elevations range from 5,200 feet to 9,176 feet.	Extremely complex transition zone between Rio Grande Rift, the southeastern margin of the Colorado Plateau, and the Datil-Mogollon volcanic field.	37,820 acres pinyon-juniper woodland; 2,868 acres grama-galleta steppe; 2,000 acres pine-Douglas fir forest. Potential occurrence for 21 threatened or endangered plant species.	Two SHS's support approximately 201 wildlife species including 56 mammal species, 51 reptile and amphibian species, and 94 resident and migratory bird species. Representative wildlife includes mule deer, pronghorn, mountain lion, coyote, bobcat, fox, badger, Gambel's and scaled quail, mourning dove, and numerous songbirds. Good raptor habitat.	Seventeen recorded sites ranging from lithic scatters to historic sites. Most of WSA is uninventoried.	High wilderness values have been recognized for many years; mountain core of area is spectacular; naturalness enhanced by dramatic landforms, high topographic diversity, and relatively large size. Solitude and recreation opportunities are outstanding.
(2) Portion Recommended Suitable -31,244 acres of public land -373 acres of private inholdings -1,320 acres of State inholdings	Same as Entire WSA.	Same as Entire WSA.	29,244 acres pinyon-juniper woodland; 2,000 acres pine-Douglas fir forest. Potential occurrence for 21 threatened or endangered plant species.	Same as Entire WSA.	Eight recorded sites ranging from lithic scatters to historic sites. Most of WSA is uninventoried	Same as Entire WSA.
(3) Portion Recommended Nonsuitable -11,444 acres of public land	Elevations range from 5,300 feet to 7,000 feet.	Same as Entire WSA.	8,576 acres pinyon-juniper woodland; 2,868 acres grama-galleta steppe. Potential occurrence for 5 threatened or endangered plant species.	One SHS supports approximately 112 wildlife species including 29 mammal species, 36 reptile and amphibian species, and 47 resident and migratory bird species. Representative wildlife same as Entire WSA excluding mountain lion.	Nine recorded sites ranging from lithic scatters to historic sites. Most of WSA is uninventoried.	Naturalness values impaired by rangeland developments in northern portion of area.

TABLE 3-2 (continued)
SUMMARY OF AFFECTED ENVIRONMENT[a]/

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			SOCORRO RESOURCE AREA (concluded)			
STALLION						
(1) Entire WSA -24,238 acres of public land -1,280 acres of State inholdings	Semiarid mountainous environment; rock escarpments, badlands, box canyons, rolling pinyon-juniper and grass covered hills. Elevations range from 5,500 feet to 7,100 feet.	Dominated by the fault zone of the Rio Grande Rift; forms portion of the highlands east of the Rio Grande and west of the Jornada del Muerto basin.	21,238 acres pinyon-juniper woodland; 3,000 acres grama-tobosa shrubsteppe. Potential occurrence for 10 threatened or endangered plant species.	Three SHS's support approximately 169 wildlife species including 50 mammal species, 28 reptile and amphibian species, and 91 resident and migratory bird species. Representative wildlife includes mule deer, pronghorn, coyote, bobcat, scaled quail, and songbirds. Good raptor habitat.	Four recorded cultural sites ranging from lithic scatters to a historic structure. Potential for unrecorded sites is high. Most of WSA is uninventoried.	WSA is natural in appearance. However, presence of two military structures on highest points in WSA reduce quality of naturalness values. Solitude values are impaired by frequent low level jet overflights by military. Opportunities for primitive recreation exist but are not considered outstanding.
(2) Portion Recommended Suitable -0 acres						
VERANITO						
(1) Entire WSA -7,206 acres of public land	Mesa benchlands cut by arroyos; a series of low lying hills lies on the east. Elevations range from 4,600 feet to 5,400 feet.	Located within the Socorro trough, a faulted tectonic depression filled with alluvium deposits; the trough is part of the Rio Grande Rift.	7,206 acres grama-tobosa shrubsteppe. Potential occurrence of four threatened or endangered plant species.	Two SHS's support approximately 213 wildlife species including 27 mammal species, 41 reptile and amphibian species, 145 resident and migratory bird species. Representative wildlife includes mule deer, raccoon, coyote, Gambel's and scaled quail, mourning dove, and songbirds. Potential bald eagle, peregrine falcon, and whooping crane habitat due to proximity to Rio Grande.	Three recorded cultural sites within WSA; potential for additional sites is high.	Naturalness values are not high; solitude opportunities are outstanding; recreation opportunities are considered marginal.
(2) Portion Recommended Suitable -0 acres						

TABLE 3-2 (concluded)
SUMMARY OF AFFECTED ENVIRONMENT[a/]

WSA/Land Status	Topography	Geology	Vegetation	Wildlife	Cultural	Wilderness Values
			WHITE SANDS RESOURCE AREA			
BROKEOFF MOUNTAINS						
(1) Entire WSA -31,386 acres of public land -1,520 acres of State inholdings	Desert mountain range following a north-south trend. The dominant feature is Cutoff Ridge, which rises 3,000 feet above the surrounding terrain.	Fault block of marine sedimentary rocks.	27,934 acres grass limestone hill, 3,139 acres grass mixed desert shrub gravelly loam, 313 acres grass mixed desert shrub gypsum. Potential habitat for one State-listed rare plant species.	Numerous bird species, particularly raptors. Mule deer populations and occasional elk.	One known site (result of lack of inventory rather than absence of sites).	High degree of apparent naturalness. Rugged terrain enhances opportunities for solitude and recreation.
(2) Portion Recommended Suitable -0 acres						

Source: BLM, Las Cruces District Wilderness Analysis Reports, 1982, 1984.

Note: a/Appendices A through Z contain more detailed information on each WSA.

TABLE 3-3
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		LAS CRUCES/LORDSBURG RESOURCE AREA			
ADEN LAVA FLOW					
(1) Entire WSA	Poor oil and gas potential. Geothermal resources presently not economically exploitable. Slab lava rock occurs in WSA, but is not presently economically exploitable.	WSA includes parts of two allotments. Four pipelines and troughs are proposed.	Off-road vehicles, hunting, lava collecting, sightseeing.	Two quail guzzlers are just outside the WSA.	Education/Research: Designated 4,008-acre Research Natural Area. Studies have been done on carnivores, bats, other mammals, melanistic species, and plant-soils relationships.
ALAMO HUECO MOUNTAINS					
(1) Entire WSA	Pediment and bolson area adjacent to mountains has good petroleum potential. Low potential for geothermal energy. Low nonenergy minerals potential.	WSA includes parts of two allotments.	Primitive recreation opportunities are limited because of land ownership patterns.	Some water developments are planned in Habitat Management Plan. Protective stipulation for desert bighorn sheep for energy minerals leasing.	Education/Research: Potential for desert bighorn sheep or paleoenvironmental studies in dry caves.
BIG HATCHET MOUNTAINS					
(1) Entire WSA	Entire WSA is prospectively valuable for oil and gas. Best potential is in pediment and bolson areas adjacent to the steep mountainous portions of the range. Presently, subeconomic deposits of lead, zinc, silver, copper, gypsum, and cement-grade limestone.	WSA includes parts of three allotments.	Closed to hunting.	Protective stipulation for bighorn sheep for energy minerals leasing. Wildlife waters and mineral supplement stations primarily for the desert bighorn sheep. Sheep Habitat Management Plan.	Education/Research: Research on desert bighorn sheep. There is a potential for paleoenvironmental studies in dry caves. Realty Actions: A small unauthorized communication site is located on Big Hatchet Peak.
(2) Portion Recommended Suitable	Suitable area is outside area with best oil and gas potential. Nonenergy minerals potential same as Entire WSA.	Includes parts of three allotments--includes very small part of U-Bar allotment.	Same as Entire WSA.	Same as Entire WSA.	Education/Research: Same as Entire WSA. Realty Actions: Same as Entire WSA.
(3) Portion Recommended Nonsuitable	Best oil and gas potential. Low nonenergy minerals potential.	Includes most of U-Bar allotment and small parts of two other allotments.	Same as Entire WSA.	Portion covered by protective stipulation.	Education/Research: Research on desert bighorn sheep. Realty Actions: No current or potential uses.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
BLUE CREEK					
(1) Entire WSA	Low energy minerals potential. Low potential for manganese.	WSA includes parts of four allotments. Proposed erosion control dams.	Very little use in WSA. Some deer hunting.	Proposed fencing of one dirt tank so that vegetation for food and cover could be planted in the exclosure for wildlife.	Watershed: Proposed water control structures to reduce flood and sediment damages. Realty Actions: San Carlos Indian Irrigation Project Withdrawal, Powersite Withdrawal, Sunset Ditch Company right-of-way for flood control structures.
CEDAR MOUNTAINS					
(1) Entire WSA	Low energy minerals potential. Low nonenergy minerals potential.	WSA includes parts of five allotments. A half-mile pipeline is proposed.	Hunting, sightseeing.	One quail guzzler.	
COOKE'S RANGE					
(1) Entire WSA	Low energy minerals potential. Moderate to high potential for an economic occurrence of strategic minerals such as lead, silver, copper, fluorspar.	WSA includes parts of four allotments.	Current recreation use includes rockhounding, hunting, hiking, picnicking, camping, and sightseeing. Recreational off-road vehicle use occurs on the WSA boundary roads.	Potential desert bighorn sheep transplant site. Protective leasing stipulation for nesting raptors.	
COWBOY SPRING					
(1) Entire WSA	Low energy minerals potential. Low nonenergy minerals potential.	WSA includes parts of two allotments.	Use limited by lack of access. Currently, some deer hunting in WSA. Continental Divide National Scenic Trail could be routed through WSA.	Potential desert bighorn sheep transplant.	Education/Research: Studies are being conducted on feral hogs, vertebrates, and the effects of fire.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a]/

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
FLORIDA MOUNTAINS					
(1) Entire WSA	Low oil and gas potential. High potential for base metals, precious metals, and manganese. Underground hardrock exploration occurring in T. 26 S., R. 8 W., Section 1, SE 1/4.	WSA includes parts of six allotments. A pipeline off an existing windmill is proposed.	Opportunities for hiking, climbing, rockhounding, nature study, and hunting. Three limited permit ibex hunts annually. Off-road vehicle use on boundary roads and trails. Spring Canyon State Park adjacent to north boundary.	Area covered by Habitat Management Plan. Primary objective is Persian ibex management. Two quail guzzlers and umbrella catchments in WSA.	Education/Research: Past studies conducted on Persian ibex, plant surveys, and geology (thrust faults and tectonic significance). Realty Actions: Mineral material pit right-of-way (ROW) and electric transmission line ROW form WSA boundaries. Barite of America Mine access road has 10-year ROW.
GILA LOWER BOX					
(1) Entire WSA	Low energy minerals potential. Low nonenergy minerals potential.	WSA includes parts of four allotments. A dirt tank is proposed. One water gap and a fence are proposed.	Wide diversity of primitive recreation opportunities. Proposed recreation management plan for Lower Gila River includes WSA. Portion of WSA recommended for special designation. Objectives include maintenance of recreation resources.	Potential desert bighorn sheep transplant site. Proposed research on endangered species and javelina. Proposed Habitat Management Plan. Portion of WSA designated Area of Critical Environmental Concern with protection and improvement of riparian habitat for wildlife primary management objective.	Realty Actions: San Carlos Indian Irrigation Project Withdrawal, powersite reservations, temporary right-of-way for U.S. Geological Survey gauging station.
(2) Portion Recommended Suitable	Same as Entire WSA.	Includes parts of three allotments. A dirt tank, water gap, and a fence are proposed.	Same as Entire WSA.	Same as Entire WSA.	Realty Actions: San Carlos Indian Irrigation Project Withdrawal and powersite reservations.
(3) Portion Recommended Nonsuitable	Same as Entire WSA.	Includes parts of four allotments.	No existing or proposed recreation management actions.	No wildlife developments.	Realty Actions: Temporary right-of-way for U.S. Geological Survey gauging station.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		LAS CRUCES/LORDSBURG RESOURCE AREA (continued)			
LAS UVAS MOUNTAINS					
(1) Entire WSA	Low energy minerals potential. Low nonenergy minerals potential.	WSA includes parts of four allotments.	Rockhounding, sightseeing, hunting, off-road vehicles.	No wildlife developments.	Vegetative Products: 5,210 acres identified for vegetation sale area.
ORGAN MOUNTAINS					
(1) Entire WSA	Low energy minerals potential. High nonenergy minerals potential for gold, silver, copper, lead, zinc, fluorspar.	WSA includes parts of five allotments. A spring has been proposed for development.	WSA is within the Organ Mountains Recreation Lands. Developed site 1/4 mile from WSA. Baylor Pass National Recreation Trail bisects the WSA. Recreation use includes hunting, sightseeing, rock collecting, camping, hiking, rock climbing, horseback riding.	No existing wildlife developments. Possible desert bighorn sheep supplemental transplant site. Future deer Habitat Management Plan.	Visual: Organ Mountains Scenic ACEC to protect and manage visual resources. Education/Research: Potential for geological and dendrochronological studies.
ROBLEDO MOUNTAINS					
(1) Entire WSA	Low to moderate energy minerals potential. Moderate to high nonenergy minerals potential for dolomite, limestone, manganese.	WSA includes parts of four allotments. An allotment boundary fence is proposed.	Rockhounding, off-road vehicle use.	No wildlife developments.	Realty Actions: Two rights-of-way for communication sites on Lookout Peak. Small withdrawal for Rio Grande canalization. Application for flood control structures.
WEST POTRILLO MOUNTAINS AND MOUNT RILEY					
(1) Entire WSA	Best potential for oil and gas is along west pediment and in valley between the West Potrillo Mountains and Aden Lava Flow. Geothermal resources presently not economically exploitable. Existing cinder mining operation. Low potential for locatables.	WSA includes parts of five allotments.	Recreational use includes off-road vehicles, sightseeing, rockhounding, hunting, and primitive recreation.	No wildlife developments.	Vegetative Products: Approximately 23,040 acres have been identified as a potential vegetation collection and sale area.
(2) Portion Recommended Suitable	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Vegetative Products: Same as Entire WSA.
(3) Portion Recommended Nonsuitable	Same as Entire WSA.	Includes parts of two allotments.	Same as Entire WSA.	Same as Entire WSA.	Vegetative Products: No current or potential uses.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
			SOCORRO RESOURCE AREA		
ANTELOPE					
(1) Entire WSA	Low oil and gas, coal, and geothermal potential. Low potential for locatables. No mining claims.	WSA includes parts of two allotments.	Dove and quail hunting. Vehicular sightseeing along east side of WSA. Existing use is low.	One umbrella catchment in WSA.	Military: WSA is within the White Sands Missile Range Aerobee 350 Safety Evacuation Zone.
(2) Portion Recommended Suitable	Same as Entire WSA.	Includes part of one allotment.	Dove and quail hunting. Existing use is low.	No existing or proposed wildlife projects.	Military: Same as Entire WSA.
(3) Portion Recommended Nonsuitable	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Military: Same as Entire WSA.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		SOCORRO RESOURCE AREA (continued)			
CONTINENTAL DIVIDE					
(1) Entire WSA	Two oil and gas leases cover the eastern portion of the WSA. The northwestern portion of the WSA has been classified as not prospectively valuable for oil and gas. WSA may provide an environment for tin, molybdenum, fluorspar, and associated minerals. There are three current mining claims in the WSA.	WSA includes parts of five allotments.	Current use consists primarily of big game hunting. Low levels of backcountry use. Potential for increased backcountry use due to 17 miles of proposed Continental Divide National Scenic Trail.	Approved Habitat Management Plan designed to improve and protect wildlife habitat. Objectives include the creation of more roosts, water sources, and prey species for bald eagles and to produce more forage for elk, mule deer, and pronghorn.	Timber Harvest: Contains an estimated 9.1 million board feet of ponderosa pine and 15,070 cords of standing pinyon-juniper. Potential as a fuelwood area reduced by remote location. Potential for timber production reduced by low stand vigors, accessibility problems, and the presence of more suitable commercial timber stands on Forest Service land in the area. Education/Research: Region is used by U.S. Air Force for low altitude training flights. Nationally significant archaeological research has been conducted and will continue at Bat Cave.
(2) Portion Recommended Suitable	Eliminates the majority of the lands which have been classified as prospectively valuable for oil and gas. Also removes three mining claims.	Includes parts of three allotments.	Deer hunting major current use. Outstanding opportunities for primitive recreation.	Same as Entire WSA.	Timber Harvest: Same as Entire WSA. Education/Research: Same as Entire WSA.
(3) Portion Recommended Nonsuitable	This portion of the WSA has been classified as prospectively valuable for oil and gas. This area contains three mining claims and is presently leased for oil and gas.	Includes parts of two allotments.	Pronghorn hunting major current use. Opportunities for primitive recreation exist but are not considered outstanding. Contains 7 miles of proposed Continental Divide National Scenic Trail.	Same as Entire WSA.	Timber Harvest: Minimal potential for timber production for fuelwood. Education/Research: Used by U.S. Air Force for low altitude training flights.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		SOCORRO RESOURCE AREA (continued)			
DEVIL'S BACKBONE					
(1) Entire WSA	Four oil and gas leases within WSA. No mining claims. Considered to have low mineral development potential.	WSA includes parts of four allotments.	Current use is low. Some big game hunting occurs during deer season. Poor access.	WSA will be managed in accordance with the Nogal Canyon Habitat Management Plan.	
EAGLE PEAK					
(1) Entire WSA	Three oil and gas leases exist in the WSA. Low potential for coal. Moderate uranium mineralization believed to be present.	WSA includes parts of four allotments.	Current use is limited to deer hunting. Opportunities exist for backpacking, hiking, camping, and photography.	A Habitat Management Plan (HMP) proposed for the area would increase browse species and wildlife water sources.	Timber Harvest: WSA contains extensive pinyon-juniper woodlands suitable for fuelwood and fence posts; involves an estimated 8,430 cords of standing greenwood. Native American Uses: Religious use at Zuni Salt Lake on northern border.
HORSE MOUNTAIN					
(1) Entire WSA	WSA has been segregated from the general mining laws since 1970. There are no current mining claims in the WSA. The northern and southern portions of the WSA are leased for oil and gas. WSA may provide an environment for tin, molybdenum, fluorspar, and associated minerals.	WSA includes parts of three allotments.	Current use is primarily big game hunting. Backcountry recreation use is low. Area offers outstanding potential for all types of backcountry recreation.	Approved HMP designed to improve and protect wildlife habitat. Objectives include creation of more roosts, water sources, and prey species for bald eagles and to produce more forage for elk, mule deer, and pronghorn.	Timber Harvest: Potential as fuelwood area reduced by lack of legal access. Ponderosa stands contain about 3.7 million board feet of standing timber of marginal commercial potential. Potential is not as great as timber stands on Forest Service land in the area. Education/Research: Region is used by U.S. Air Force for low altitude training flights.
(2) Portion Recommended Suitable	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.
(3) Portion Recommended Nonsuitable	Same as Entire WSA.	Includes part of one allotment.	Offers little or no potential for backcountry recreation.	This portion of the WSA was not included in the HMP.	Timber Harvest: No potential for timber. Very slight potential for fuelwood. Education/Research: Same as Entire WSA.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		SOCORRO RESOURCE AREA (continued)			
JORNADA DEL MUERTO					
(1) Entire WSA	Six oil and gas leases within WSA. No mining claims. Considered to have low mineral development potential.	WSA includes parts of two allotments.	Current use is low.	No wildlife developments.	Military: WSA is located entirely within White Sands Missile Range Aerobee 350 Safety Evacuation Zone.
MESITA BLANCA					
(1) Entire WSA	One oil and gas lease in the WSA. Low potential for coal. WSA is believed to contain moderate uranium mineralization.	WSA includes parts of three allotments.	Current recreation use is low. Red Hill Cinder Cone and Lava Flow are the primary recreational asset. Low deer populations provide marginal deer hunting opportunities.	A Habitat Management Plan proposed for the area would increase browse species and wildlife water sources.	Timber Harvest: Scattered areas of pinyon-juniper offer potential for fuelwood and fence posts. WSA is estimated to contain 4,000 cords of standing greenwood. Education/Research: Archaeological resources have been researched in the past and continue to offer opportunities for future research uses.
PRESILLA					
(1) Entire WSA	Low oil and gas potential. Moderate geothermal and uranium potential. Low to moderate potential for fluorspar, barite, lead, and zinc. Low potential for copper.	All of one and parts of four allotments are within the WSA.	Activities include hunting, archaeological sightseeing, off-road vehicle use, rock collecting, hiking, camping, and rock climbing.	No wildlife developments.	Cultural: Designated Tinajas Natural Area of Critical Environmental Concern (1,280 acres) to protect pictographs. Education Research: New Mexico Institute of Mining and Technology has conducted geologic studies in the area. Military: Portions of the WSA are located within the White Sands Missile Range Safety Extension Area.

TABLE 3-3 (continued)
EXISTING AND POTENTIAL USES[a/]

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		SOCORRO RESOURCE AREA (continued)			
SIERRA DE LAS CANAS					
(1) Entire WSA	Six oil and gas leases and approximately 20 mining claims within WSA. Considered to have moderate potential for geothermal, copper, barite, fluorite, lead, and zinc.	WSA includes parts of five allotments.	Current use is low. High potential for all types of backcountry recreation due to proximity to Socorro and the Rio Grande Valley.	No wildlife developments.	Military: WSA is located entirely within the White Sands Missile Range Safety Extension Area.
(2) Portion Recommended Suitable	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Same as Entire WSA.	Military: Same as Entire WSA.
(3) Portion Recommended Nonsuitable	Moderate to low potential for mineral development.	Includes part of one allotment.	Potential for backcountry recreation reduced by small size of the area.	Same as Entire WSA.	Access: Provides access corridor to private inholding.
SIERRA LADRONES					
(1) Entire WSA	Six oil and gas leases and approximately 89 mining claims within WSA. Considered to have high potential for mineral development.	Includes all of one and parts of eight allotments.	Current use is moderate. High potential for backcountry recreation due to diverse landforms and vegetation, high scenic qualities, proximity to Albuquerque, and good access.	The area has been identified for introduction of desert bighorn sheep by New Mexico Department of Game and Fish.	Timber Harvest: Contains 35,400 acres of nonproductive forest land. No potential for sawtimber production. Fuelwood production considered marginal due to inaccessibility, low tree density, small tree size, and availability of alternate cutting areas.
(2) Portion Recommended Suitable	Contains six oil and gas leases and majority of mining claims. Retains area considered to have highest potential for mineral development.	Includes parts of seven allotments.	Rugged mountain environment, box canyons, and badlands offer high potential for backcountry recreation.	Same as Entire WSA.	Timber Harvest: Contains approximately 24,400 acres of nonproductive forest land. Fuelwood production considered marginal.
(3) Portion Recommended Nonsuitable	Contains land with potential for oil and gas, carbon dioxide, high-calcium limestone, gypsum, and manganese.	Includes parts of two allotments and majority of rangeland developments.	Recreation potential generally low.	No wildlife developments.	Timber Harvest: Contains approximately 11,000 acres of nonproductive forest land. Fuelwood production considered marginal.

TABLE 3-3 (concluded)
EXISTING AND POTENTIAL USES

WSA	Minerals	Livestock Grazing	Recreation	Wildlife	Other
		SOCORRO RESOURCE AREA (continued)			
STALLION					
(1) Entire WSA	Seventeen oil and gas leases within WSA. No mining claims. Considered to have moderate potential for copper and limestone.	WSA includes parts of four allotments.	Current use is low. Some big game hunting occurs during deer season. Potential use is limited by poor access.	No wildlife developments.	Timber Harvest: Contains approximately 23,000 acres of nonproductive forest land. No potential for sawtimber production. Fuelwood production considered marginal due to inaccessibility, low tree density, small tree size, and availability of alternate cutting areas. Military: WSA is located entirely within the White Sands Missile Range Safety Extension Area.
VERANITO					
(1) Entire WSA	Contains four oil and gas leases. No mining claims within WSA. Considered to have high potential for geothermal and moderate potential for uranium, sand, and gravel.	WSA includes parts of three allotments.	Current use is low. Potential for future use is limited except in cottonwood bosque area.	Planned actions for the cottonwood bosque area include fencing and prescribed burns.	Military: Portion of WSA is located within the White Sands Missile Range Safety Extension Area.
		WHITE SANDS RESOURCE AREA			
BROKEOFF MOUNTAINS					
(1) Entire WSA	Prospectively valuable for oil and gas. Low potential for occurrence of strategic minerals.	WSA includes all or parts of 7 allotments.	Very little use in WSA. Some deer hunting.	No wildlife developments.	

Source: BLM, Las Cruces District Wilderness Analysis Reports, 1982, 1984.

Note: a/Appendices A through Z contain more detailed information on each WSA.

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

SUMMARY OF IMPACTS

Table 4-1 includes a summary for each Wilderness Study Area (WSA) of the environmental consequences of each of the alternatives analyzed. Further discussion of the environmental consequences for each WSA is contained in the Wilderness Analysis Reports (WARs) (Volume 2, Appendices A-Z).

In developing Table 4-1, the evaluation of environmental impacts and the results of scoping were used to categorize environmental impacts into three categories; significant impacts, clearly insignificant impacts, and impacts which need to be addressed in order to show the full range of environmental consequences. Significant impacts are underlined in Table 4-1. Significant impacts will be carried forward into the BLM New Mexico Statewide Wilderness Environmental Impact Statement and will be addressed along with regional/statewide impacts and application of the BLM Wilderness Study Criterion which requires consideration of the extent to which wilderness designation of each area under study would contribute to expanding the diversity of the National Wilderness Preservation System.

Wilderness Management Plans will be prepared for those areas designated wilderness. These plans will provide the opportunity to incorporate measures designed to mitigate adverse environmental impacts.

SOCIAL AND ECONOMIC IMPACTS

In addition to the impacts summarized in Table 4-1, there would be overall social and economic impacts which would apply to all areas discussed.

Wilderness designation would not have a significant impact on the population, income, and employment for the counties that contain WSAs: Dona Ana, Grant, Hidalgo, Luna, Catron, Socorro, Otero, and Sierra Counties.

Local Attitudes and Perceptions

Wilderness designation would not change the general attitudes or values of local residents, but could affect specific attitudes toward the BLM, the Federal Government, and how some ranchers view the future of their operations. Some ranch operators think that as a result of changing administrations, policy modifications could result in drastic changes in livestock numbers or prohibition of rangeland developments in areas designated wilderness. Ranchers are also concerned about the changes in ranch loan and sale values that could occur as a result of wilderness designation. If designation occurs, many ranchers feel their operation would be less valuable than it was before designation.

TABLE 4-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA				
ADEN LAVA FLOW							
All Wilderness [23,857 acres]	No significant impacts.	No significant impacts.	No significant impacts. Habitat would be protected.	No significant impacts. Portions of proposed pipelines would not be authorized.	No significant impacts. Use patterns would change.	Significant long-term Congressional protection.	
No Action/No Wilderness [23,857 acres]	No impacts.	No significant impacts.	No significant impacts. Potential loss of some wildlife habitat.	No impacts. All proposed rangeland developments could be constructed.	No significant impacts. Motorized recreation use could increase.	Potential significant impacts to wilderness values.	
ALAMO HUECO MOUNTAINS							
All Wilderness [10,796 acres]	No opportunity to fully evaluate oil and gas potential. No additional oil and gas leasing.	No significant impacts. Long-term protection for existing resources.	No significant impacts. Maintenance of existing habitat.	No significant impacts. Motorized access to check livestock would not be permitted on 3 1/2 miles existing trails.	No impacts.	Significant long-term Congressional protection. Area could not be managed because of land status patterns and boundary configuration.	
No Action/No Wilderness [10,796 acres]	Limitations on types of exploration and access could cause significant impacts to oil and gas development.	No significant impacts. Potential loss of vegetation and soils if oil and gas development occurs.	No significant impacts. Potential for some habitat loss.	No impacts.	No impacts.	Potential significant impacts to wilderness values.	

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)				
BIG HATCHET MOUNTAINS							
All Wilderness [58,014 acres]	No opportunity to fully evaluate oil and gas potential. No additional oil and gas leasing.	Potentially significant protection for soils and vegetation on 13,000 acres not covered by protective leasing stipulation.	Potentially significant protection for wildlife and habitat on 13,000 acres.	Potential slight impacts to livestock operators by restricting vehicular access.	No impacts.	Significant long-term Congressional protection. Development on pre-FLPMA leases could affect 800 acres.	
Amended Boundary [41,293 acres recommended suitable, 16,721 acres recommended nonsuitable]	Less conflict with energy minerals because the area with the best oil and gas potential is outside the boundary.	Protection of existing resources. Potentially significant protection for 3,300 acres not covered by protective leasing stipulation.	Protection of existing wildlife and habitat within the boundary. Potentially significant protection for 3,300 acres.	Same as All Wilderness except most of U-Bar allotment is outside the boundary.	No impacts.	The highest quality wilderness values and special features would receive significant long-term Congressional protection.	
No Action/No Wilderness [58,014 acres]	No significant impacts.	Potential for significant loss of vegetation on 13,000 acres not covered by protective leasing stipulation.	Endangered species would be protected. Other species would receive no special protection.	No impacts.	No significant impacts.	Potentially significant impacts to wilderess values.	
BLUE CREEK							
All Wilderness [14,096 acres]	No significant impacts.	No significant impacts. Long-term protection of existing resources.	No significant impacts. Wildlife habitat would be protected.	No significant impacts. No motorized access on 4 miles of existing trails.	No impacts.	Potentially significant long-term Congressional protection. Area could not be managed as wilderness.	
No Action/No Wilderness [14,096 acres]	No impacts.	Potential improvement of vegetation cover and soil stabilization.	No significant impacts.	No impacts.	No impacts.	Potential degradation of wilderness values.	

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)				
CEDAR MOUNTAINS							
All Wilderness [14,911 acres]	No significant impacts.	Long-term protection of existing resources.	No significant impacts.	No significant impacts. Possible inconveniences due to restricted vehicular access on 10 miles existing trails.	No impacts.	Potential significant long-term Congressional protection.	
No Action/No Wilderness [14,911 acres]	No impacts.	No significant impacts.	No significant impacts. Potential slight loss of wildlife habitat.	No impacts.	No impacts.	Potential significant long-term impacts.	
COOKE'S RANGE							
All Wilderness [19,608 acres]	No opportunity to explore, prospect, or locate additional mining claims. Could have significant impacts on locatable mineral resources.	No significant impacts. Protection of most existing resources.	No significant impacts. Preservation and protection of most wildlife habitat.	No significant impacts. No motorized access on existing trails.	No impacts.	Potential significant long-term Congressional protection. Area could not be managed as wilderness in the long-term.	
No Action/No Wilderness [19,608 acres]	No impacts.	No significant impacts. Potential loss of vegetation and soil and small increase in sediment load if mining occurs.	No significant impacts. Potential for disruption of wildlife and habitat.	No impacts.	No significant impacts.	Potentially significant degradation of natural values and opportunities for solitude and primitive recreation.	

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)				
COWBOY SPRING							
All Wilderness [6,699 acres]	No significant impacts.	No significant impacts. Long-term protection of existing resources.	No significant impacts. Protection of wildlife habitat. Desert bighorn sheep could be transplanted in the area.	No significant impacts. No motorized access on 1 mile of trail.	No significant impacts. Hunters would be denied vehicular access on 1 mile of trail.	Potential significant long-term Congressional protection.	
No Action [6,699 acres]	No impacts.	No significant impacts.	No significant impacts. Desert bighorn sheep could be transplanted in the area.	No impacts.	No impacts.	Area probably would retain its wilderness values in short-term. Potential significant long-term impacts.	
No Wilderness/ Designate as a Research Natural Area [6,699 acres]	No impacts.	No significant impacts. Existing resources would be protected.	No significant impacts. Protection of wildlife habitat. Desert bighorn sheep could be transplanted in the area.	No impacts.	No significant impacts.	Values substantially maintained as long as administratively designated. Potential significant long-term impacts.	Education/ Research: RNA designation would enhance research opportunities in "bootheel" area.
FLORIDA MOUNTAINS							
All Wilderness [22,336 acres]	Potentially significant impacts on locatable minerals.	Long-term protection and maintenance of existing resources.	Existing habitat would be maintained.	No impacts on current levels of authorized grazing use. Permits required to maintain 1 windmill and 2 improved springs. No motorized access on 7 miles of vehicle trails.	No significant impacts.	Significant long-term Congressional protection. Development of valid mining claims could significantly degrade wilderness values.	
No Action/No Wilderness [22,336 acres]	No impacts	No significant impacts. Slight loss of soil and vegetation.	Wildlife and habitat disturbed if mineral development occurs.	No impacts.	No significant impacts.	No long-term Congressional protection. Exploration and development of mining claims could significantly degrade wilderness values.	

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)				
GILA LOWER BOX							
All Wilderness [8,555 acres]	No significant impacts. No opportunity for further assessment of the area's mineral potential or for development and production.	Potential significant improvement of soils, water, and vegetation.	Potential significant improvement of wildlife and wildlife habitat.	No significant impacts. No motorized access on 1 1/2 miles existing trail.	No impacts.	Significant long-term Congressional protection.	Realty Actions: U.S. Geological Survey (USGS) temporary right-of-way (ROW) for the new gauging station would be revoked and the gauging station removed.
Amended Boundary [5,835 acres recommended suitable, 2,720 acres recommended nonsuitable]	No significant impacts. Impacts to resources within the amended boundary would be the same as the All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	No impacts.	Wilderness values within the amended boundary would be subject to significant long-term Congressional protection.	Realty Actions: A permanent ROW would be issued to the USGS for the gauging station.
No Action/No Wilderness [8,555 acres, 2,469 acres managed as ACEC]	No significant impacts.	Potential significant impacts to water, soils, and vegetation.	Same as All Wilderness Alternative.	No significant impacts.	No impacts.	Potential long-term impacts to wilderness values.	Realty Actions: Same as Amended Boundary Alternative.
LAS UVAS MOUNTAINS							
All Wilderness [11,067 acres]	No significant impacts.	No significant impacts. Long-term protection for existing resources.	No significant impacts.	No significant impacts. No motorized access on 7 miles existing trails.	No significant impacts.	Significant long-term Congressional protection.	Vegetative Products: Sale of vegetative products on 5,120 acres would not be authorized.
No Action/No Wilderness [11,067 acres]	No impacts.	No significant impacts.	No significant impacts.	No impacts.	No impacts.	Potential significant long-term impacts to wilderness values.	Vegetative Products: No impacts.

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)				
ORGAN MOUNTAINS							
All Wilderness [7,144 acres]	Potential significant impacts. No new exploration, prospecting, or location of mining claims. Mineral trends could not be followed outside existing valid claim boundaries.	No significant impacts.	No significant impacts. Wildlife habitat would be protected.	No significant impacts.	No significant impacts. The Baylor Pass Run would not be permitted.	Long-term Congressional protection of the area's natural appearance, opportunities for solitude and primitive recreation and special features.	Visual: No significant impacts. Existing visual resources would be protected.
No Action/No Wilderness [7,144 acres 6,551 acres managed as an ACEC]	Same as All Wilderness Alternative.	No significant impacts.	Same as All Wilderness Alternative.	No impacts.	No significant impacts. Deer hunting opportunities could improve.	Potential significant long-term impacts to wilderness values.	Visual: Significant protection of existing resources. Large gravel piles adjacent to the Stevenson-Bennett Mine would be removed.
ROBLEDO MOUNTAINS							
All Wilderness [12,811 acres]	Post-FLPMA geothermal lease holders could be significantly impacted in the short-term. Potential long-term impacts to geothermal resources. Potential significant impacts to locatable minerals.	Potential significant protection of existing resources.	Potential significant protection of existing resources.	No significant impacts. Potential minor inconveniences due to restricted vehicular access.	No significant impacts. No motorized access would be permitted on vehicle trails.	Wilderness values would have significant long-term Congressional protection.	Realty Actions: The ROW application for a flood control structure would be denied.
No Action/No Wilderness [12,811 acres]	No impacts.	Potential long-term significant loss of vegetation and topsoil if extensive mineral development occurs.	Potential long-term significant destruction of wildlife habitat.	No impacts.	No significant impacts. Potential for enhancement of off-road vehicle opportunities.	Potential long-term significant impacts to wilderness values.	Realty Actions: The ROW application for a flood control structure could be approved.

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			LAS CRUCES/LORDSBURG RESOURCE AREA (continued)				
WEST POTRILLO MOUNTAINS AND MOUNT RILEY							
All Wilderness [155,105 acres]	No significant impacts.	No significant impacts. Potential for loss of vegetation and soil on the Chaparral claims.	No significant impacts. Protection of existing resources.	No significant impacts. No vehicular access on 72 miles of vehicle trails.	No significant impacts. Use patterns would be altered by denying motorized access on existing trails.	Wilderness values would have significant long-term Congressional protection.	Vegetative Products: Vegetation collection would not be allowed on 23,040 acres.
Amended Boundary [147,100 acres recommended suitable, 8,005 acres recommended nonsuitable]	No significant impacts.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Vegetative Products: Same as All Wilderness Alternative.
No Action/No Wilderness [155,105 acres]	No significant impacts.	No significant impacts.	No significant impacts. Loss of some wildlife habitat.	No impacts.	No impacts.	Potential significant long-term impacts.	Vegetative Products: No impacts.
			SOCORRO RESOURCE AREA				
ANTELOPE							
All Wilderness [20,710 acres]	No significant impacts due to low potential for mineral resources.	Existing resources would be maintained.	Existing habitat would be maintained.	No impacts on current levels of authorized use.	Vehicular access on 8 miles of vehicle routes would be denied.	Wilderness values would have significant long-term Congressional protection.	Military: No significant impacts to White Sands Missile Range.
Amended Boundary [9,892 acres recommended suitable, 10,818 acres recommended nonsuitable]	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Vehicular access on 4 3/10 miles of vehicle routes would be denied.	Same as All Wilderness Alternative.	Military: Same as All Wilderness Alternative.
No Action/No Wilderness [20,710 acres]	No impacts.	No significant impacts.	No impacts.	No impacts.	No impacts.	Wilderness values would not be provided with long-term Congressional protection.	Military: No impacts.

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			SOCORRO RESOURCE AREA (continued)				
CONTINENTAL DIVIDE							
All Wilderness [68,761 acres]	No significant impacts to energy minerals. Exploration and development of nonenergy minerals would be forgone.	Long-term protection of existing resources.	Existing habitat would be maintained.	No impacts to current levels of authorized use. Limitations on the design and placement of new developments. Restrictions on vehicular use could reduce vandalism.	No impacts to the proposed Continental Divide National Scenic Trail. Recreation activities which require motor vehicles would be forgone.	Wilderness values would have significant long-term protection.	Timber Harvest: 9.1 million board feet of timber could not be commercially developed; not significant, more suitable timber on Forest Service land and past logging has removed most commercial stands.
Amended Boundary [35,635 acres recommended suitable, 33,126 acres recommended nonsuitable]	No significant impacts to energy minerals. Majority of area prospectively valuable for oil and gas would be eliminated. No impacts to existing mining claims.	Existing resources within the amended boundary would be maintained.	Existing habitat would be maintained.	Impacts to livestock grazing within the amended boundary is same as All Wilderness Alternative. There would be no impact on two allotments.	Ten miles of the Continental Divide National Scenic Trail would be outside the amended boundary.	Impacts to wilderness values within amended boundary are same as All Wilderness. Impacts to values outside amended boundary could be significant.	Timber Harvest: Insignificant increase in available fuelwood supplies.
No Action/No Wilderness [68,761 acres]	No impacts.	Potential for reduced watershed quality.	Management action could produce a more diverse wildlife habitat.	No impacts.	Existing use patterns and opportunities for primitive recreation could continue.	Impacts to wilderness values could be significant.	Timber Harvest: No impacts.
DEVIL'S BACKBONE							
All Wilderness [8,904 acres]	Little or no impacts due to low favorability minerals occurrence.	Maintenance of existing resources.	Existing habitat would be maintained.	No significant impacts.	Hunters would not have motorized access.	Significant long-term Congressional protection.	
No Action/No Wilderness [8,904 acres]	No impacts.	No impacts.	No impacts.	No impacts.	No impacts.	Potential long-term significant impacts.	

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			SOCORRO RESOURCE AREA (continued)				
EAGLE PEAK							
All Wilderness [32,748 acres]	No significant impacts.	Construction of structural and treatment measures to reduce erosion would be restricted.	Existing habitat would be maintained.	No significant impacts.	Vehicular dependent recreation would be forgone.	Significant long-term Congressional protection.	
No Action/No Wilderness [32,748 acres]	No impacts.	Some potential for increased surface disturbance.	Habitat could be degraded.	No impacts.	No impacts.	Long-term significant reduction in wilderness values.	
HORSE MOUNTAIN							
All Wilderness [5,032 acres]	No significant impacts to minerals because of low to moderate favorability for occurrence.	Protection of existing resources.	Protection of natural values.	1.25 miles of fence and 1 mile of pipeline would not be constructed, affecting efforts to reduce grazing pressure outside the WSA. Vehicular access to West Horse Mountain headquarters on existing routes would be denied.	Vehicle dependent recreation would be forgone.	Significant long-term Congressional Protection.	Timber Harvest: Insignificant amount of timber would not be developed.
Amended Boundary [4,432 acres recommended suitable, 600 acres recommended nonsuitable]	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness except vehicular access would be allowed to the West Horse Mountain headquarters.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Timber Harvest: Same as All Wilderness Alternative.
No Action/No Wilderness [5,032 acres]	Remains withdrawn from appropriation under the mining laws; therefore, impacts to locatable minerals would be same as All Wilderness. No impacts to leasable minerals.	Increase in potential for erosion.	No impacts.	No impacts.	No impacts.	Significant impacts to wilderness values could occur.	Timber Harvest: No impacts.

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			SOCORRO RESOURCE AREA (continued)				
JORNADA DEL MUERTO							
All Wilderness [31,147 acres]	Oil and gas exploration and development that could impair wilderness values would be forgone. No significant impacts to geothermal, locatable, or saleable resources.	Protection of existing resources.	No significant impacts. Existing habitat would be maintained.	No significant impacts.	Vehicle dependent recreation would be forgone.	Long-term Congressional protection would result in significant impacts on wilderness values.	Military: White Sands Missile Range (WSMR) would not be significantly impacted.
No Action/No Wilderness [31,147 acres]	No impacts.	No significant impacts.	A wide range of management actions could occur.	No impacts.	No significant impacts.	The area would not have Congressional protection. Management would be subject to administrative change.	Military: No impacts to WSMR.
MESITA BLANCA							
All Wilderness [16,429 acres]	No significant impacts.	The condition of existing resources would be maintained. Structural and treatment measures would be restricted.	Existing habitat would be maintained.	No impacts to current levels of authorized use. Limitations on new rangeland developments and motorized access would result in insignificant impacts.	Activities which require motorized access would be restricted.	Significant long-term Congressional protection.	Timber Harvest: Harvest of approximately 4,000 cords of wood would be forgone.
No Action/No Wilderness [16,429 acres]	No impacts.	No significant impacts.	No significant impacts.	No impacts.	No impacts.	Significant impacts to wilderness values could occur.	Timber Harvest: No impacts.

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			SOCORRO RESOURCE AREA (continued)				
PRESILLA							
All Wilderness [8,680 acres]	Due to low to moderate potential, impacts to minerals would be insignificant.	Slight increase in vegetative cover as a result of mining access route rehabilitation. Restrictions on surface disturbing activities would provide long-term protection and maintain condition of existing resources.	Existing habitat would be maintained.	No impact on current levels of authorized grazing use.	No significant impacts.	Wilderness values would have significant long-term Congressional protection.	Military: No significant impacts to White Sands Missile Range.
No Action/No Wilderness [8,680 acres]	No significant impacts.	No significant impacts.	No significant impacts.	No significant impacts.	No significant impacts.	Wilderness values could be significantly impacted.	Military: Same as All Wilderness Alternative.
SIERRA DE LAS CANAS							
All Wilderness [12,838 acres]	Little or no impacts.	Maintenance or enhancement of existing resources.	Preservation of wildlife habitat.	No impacts to current levels of authorized use.	Recreational opportunities would be maintained.	Significant long-term Congressional protection.	Military: Insignificant impacts to WSMR Aerobee 350 Safety Evacuation Zone.
Amended Boundary [12,798 acres recommended suitable, 40 acres recommended nonsuitable]	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Wildlife harassment could increase.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Same as All Wilderness Alternative.	Military: Same as All Wilderness Alternative.
No Action/No Wilderness [12,838 acres]	No impacts.	Potential increased erosion and runoff.	Potential for disturbance of habitat.	No impacts.	Primitive recreation opportunities could be reduced. Vehicular access could be improved.	Significant long-term reduction of wilderness values could result.	Military: Increased public access could complicate WSMR's efforts to evacuate the area.

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			SOCORRO RESOURCE AREA (continued)				
SIERRA LADRONES							
All Wilderness [42,688 acres]	Large scale mineral development would be prevented. This is a potentially significant impact.	Maintenance of existing resources.	Preservation of wildlife habitat.	Moderate impacts to grazing use by narrowing the range of management options.	Vehicular associated recreational activities would be prohibited. Opportunities for nonvehicular recreation would be maintained.	Significant long-term Congressional protection.	
Amended Boundary [31,244 acres recommended suitable, 11,444 acres recommended nonsuitable]	Same as All Wilderness Alternative.	Same as All Wilderness Alternative except 11,444 acres of unstable, erodable soils would be excluded.	Habitat with the highest diversity and distribution of wildlife species would be preserved.	Impacts would be similar to All Wilderness Alternative, but removing numerous rangeland developments from the amended boundary would reduce the significance of these impacts.	Opportunities for primitive recreation would be preserved. Vehicle use would be excluded from 31,244 acres.	Significant long-term Congressional protection for the WSA's highest wilderness values. Wilderness values would be enhanced by eliminating the majority of the human imprints.	
No Action/No Wilderness [42,688 acres]	No impacts.	Potential for increased scars and rutting.	A wider range of management actions would be allowed. Potential for reintroduction of desert bighorn sheep may be impacted.	Possible impacts from mineral development.	Opportunities for vehicle dependent recreation could increase.	Significant long-term reduction in wilderness values could result.	

TABLE 4-1 (continued)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			SOCORRO RESOURCE AREA (continued)				
STALLION							
All Wilderness [24,238 acres]	No significant impacts.	Surface disturbance would be restricted and natural ground covers would be preserved.	Maintenance of the natural numbers and distribution of wildlife species.	2 miles of pipeline and 2 troughs would be removed. Poorer distribution of cattle on an allotment would occur.	Restriction of vehicle dependent recreation. Protection of primitive recreation opportunities.	Significant long-term Congressional protection. Potential significant impacts to wilderness values.	Timber Harvest: Little impact on regional fuelwood supplies. Wild Horses: No impacts to management. Military: WSMR would not be allowed to expand or construct additional instrumentation sites.
No Action/No Wilderness [24,238 acres]	No impacts.	Potential for increased runoff and erosion.	Potential for impacts to wildlife.	2 miles of pipeline and 2 troughs could remain. This will continue to distribute cattle on an allotment.	Opportunities for primitive recreation could be reduced.	Potential significant impacts to wilderness values.	Timber Harvest: No impacts. Wild Horses: Same as All Wilderness. Military: Increased visitation could complicate WSMR's efforts to evacuate the area.
VERANITO							
All Wilderness [7,206 acres]	No significant impacts to oil and gas and locatable minerals. Future development of geothermal resources would be forgone.	Existing resources would be maintained.	The existing distribution and numbers of wildlife species would be maintained.	No impacts.	Opportunities for primitive recreation would be maintained.	Significant long-term Congressional protection.	
No Action/No Wilderness [7,206 acres]	No impacts.	Erosion hazards could increase.	Wider range of management actions could result in enhancement of some wildlife species.	No impacts.	No significant impacts.	Potential long-term reduction of wilderness values.	

TABLE 4-1 (concluded)
SUMMARY OF ENVIRONMENTAL CONSEQUENCES[a/]

Alternatives by WSA/Acreage	Minerals	Water, Soils, Vegetation	Wildlife	Livestock Grazing	Recreation	Wilderness Values	Other
			WHITE SANDS RESOURCE AREA				
BROKEOFF MOUNTAINS							
All Wilderness [31,386 acres]	Potential significant impacts to oil and gas exploration and development.	Existing resources would be protected.	Existing resources would be protected.	Possible restrictions on management activities.	Prohibition of vehicular access for hunters could change hunting patterns.	Significant long-term Congressional protection.	
Amended Boundary [12,277 acres recommended suitable, 19,109 acres recommended nonsuitable]	Impacts to oil and gas resources within the amended boundary would be the same as All Wilderness Alternative.	Same as All Wilderness Alternative for resources within the amended boundary.	Same as All Wilderness Alternative for resources within the amended boundary.	Impacts to allotments within the amended boundary would be similar to the All Wilderness Alternative. Allotments outside the amended boundary would not be impacted.	No significant impacts.	Values within the amended boundary could receive significant long-term Congressional protection.	
No Action/No Wilderness [31,386 acres]	No impacts.	Potential minor impacts.	Potential for displacement and harassment of wildlife. Additional water sources could be developed.	Potential disruption of ranch operations. Potential for development of additional water sources.	Potential benefit to motorized recreation. Potential for disruption of hunting opportunities.	Resources could be significantly degraded in the long-term.	

Source: BLM Las Cruces District Wilderness Analysis Reports, 1984.

Note: [a/]Significant impacts are underlined.

Economic Conditions

Designation of an area as wilderness could affect the day-to-day operations of some ranches. For example, restrictions on vehicle use and motorized equipment could require that the rancher supervise livestock operations on horseback or on foot which would be less convenient and less efficient.

Most ranch operators may need to borrow operating capital. In practice, a BLM grazing permit has value for borrowing money and also adds value to the privately-owned base property at the time of the ranch sale or transfer. The market value of an animal unit month (AUM) as of September 21, 1982, was approximately $100 (Ratliff 1982). Normally, when a loan is made, the Federal Land Bank will loan approximately 65-70 percent of the market value per AUM. Because of the perceived uncertainties regarding the effects of wilderness designation on livestock grazing, those portions of a grazing allotment within the boundary of a designated wilderness could have a loan value of approximately 50-60 percent of the AUM market value (Ratliff 1982). As a result, operators who require additional operating capital for their operation may experience unfavorable economic effects if all or a part of their grazing allotment is within a designated wilderness area, since the loan value could be 10-15 percent less for those AUMs within the wilderness area than it is for AUMs outside the wilderness area.

Wilderness designation may enhance the preservation value of wilderness. The preservation value of wilderness includes option, existence, and bequest values to the general public. The option value is defined as the willingness to pay for the opportunity to have access to wilderness areas for recreation use in the future. The existence value is defined as the amount of money people are willing to pay for the knowledge that natural habitat for plants, fish, and wildlife are protected in wilderness areas. The bequest value is defined as the willingness to pay for the satisfaction derived from endowing future generations with wilderness resources (Walsh et al. 1981). Quantification of these values is beyond the scope of this document.

CHAPTER 5
CONSULTATION AND COORDINATION

PURPOSE OF SCOPING

The Council on Environmental Quality (CEQ) Regulations implementing the procedural provisions of the National Environmental Policy Act (NEPA) provide for an early and open process in the preparation of an environmental impact statement (EIS) to determine the scope of issues to be addressed and to identify the significant issues related to the proposed alternatives. This process is termed "scoping" (43 Code of Federal Regulations 1501.7). In addition, scoping requires the lead agency to inform and involve affected Federal, state, and local agencies, Indian tribes, and other interested persons. The process is designed to identify and emphasize the significant issues and eliminate those that are either not significant or have been covered by earlier environmental review.

SCOPING ACTIVITIES

To identify significant issues to be addressed in the draft Wilderness Analysis Reports (WARs) and Draft Environmental Assessments (EAs), various Federal, state, and local agencies, interest groups, and individuals were contacted through correspondence, by telephone, and in informal meetings. Other consultation and coordination activities included field trips to specific Wilderness Study Areas (WSAs) with interested individuals, small groups, and meetings with affected grazing permittees. These activities were also used to explain the results and effects of the Interior Board of Land Appeals (IBLA) rulings on certain WSAs, to solicit resource information from the various publics for inclusion in the WARs, and to explain the wilderness study procedures.

In addition, BLM resource specialists reviewed and evaluated public comments received during the inventory phase (January 1979 - November 1980) of the wilderness review, the IBLA decisions, and applied their professional judgment in analyzing and identifying significant issues.

Furthermore, an extensive mailing list has been assembled throughout the wilderness inventory and study process to ensure that all Federal, state, and local agencies, interest groups, and individuals are kept informed of the progress of the wilderness review.

SCOPING RESULTS

This section briefly discusses the significant issues that have been identified thus far for each WSA. As noted earlier in this document, information presented in this Final EA and the Final WARs will serve as the data base for the BLM New Mexico Statewide EIS. Similarly, the issues

identified in this section will serve as the starting point for scoping of issues to be addressed in the Statewide EIS. Therefore, the following discussions include not only those issues identified in the scoping activities for the Draft WARs and Draft EAs, but also concerns identified by the public during the review on the draft documents and further analysis of significant issues by BLM resource specialists based on the resource data, alternatives, and impacts presented in the Final WARs.

Las Cruces/Lordsburg Resource Area

Aden Lava Flow WSA

Initial scoping activities identified the quality of the Aden Lava Flow WSA's wilderness values as the primary issue of concern to the public. Those favoring wilderness designation for the area stated that the WSA has high quality wilderness values, including ecological and geological supplemental values. Those opposed to wilderness designation felt the area's wilderness values were not of a high quality, especially opportunities for solitude which were described as less than outstanding due to the outside sights and sounds of the nearby Southern Pacific Railroad, Interstate 10, and low level training flights of military aircraft. Aggregate minerals, oil and gas potential, and geothermal energy potential were initially identified as possible resource conflicts.

The Aden Lava Flow WAR and public comments on the Draft EA again identified the quality of the area's wilderness values as the primary issue for the Aden Lava Flow WSA. The fact that there is little designated wilderness in southern New Mexico and the Aden Lava Flow is close to major population centers was also identified as an issue of concern.

Alamo Hueco Mountains WSA

Wilderness values, special geologic, cultural, wildlife, and botanic features, manageability as wilderness, and oil and gas potential were the issues identified for this WSA in the initial scoping activities, the WAR, and public comments on the Draft EA. Land status patterns and the resultant irregular configuration of the WSA were identified as major manageability problems. The pediments of the Alamo Hueco Mountains and the surrounding flats have high oil and gas potential which represents a major resource conflict issue.

Big Hatchet Mountains WSA

The quality of the area's wilderness values, the State endangered desert bighorn sheep, and oil and gas potential were identified as primary issues of concern to the public during the initial scoping activities for the Big Hatchet Mountains wilderness study. Comments regarding the desert bighorn sheep ranged from the judgment that the sheep represent a supplemental value to the concern that wilderness designation would limit management options for the sheep. The WSA's oil and gas potential, especially along the pediments of the mountains, in the surrounding flats, and around U-Bar Ridge represents a major resource conflict issue.

Two additional issues identified in the WAR and in public comments on the Draft EA included the wilderness manageability of portions of the WSA and the value of the area as an addition to the National Wilderness Preservation System in terms of ecosystem diversity and primitive recreation opportunities for the growing population of the Southwest.

Blue Creek WSA

Two issues were identified for the Blue Creek WSA in the initial scoping activities, the WAR, and in public comments on the Draft EA: wilderness values and the potential for managing the area as wilderness. Public concerns regarding these two issues ranged from "the area meets the basic wilderness criteria and manageability conflicts are not appropriate for consideration in the wilderness study" to "the area lacks wilderness characteristics and has a poor configuration for management." BLM resource specialists' identification of issues focused on the quality of the area's wilderness values and the effects of land status patterns and location of rangeland developments on wilderness manageability.

Cedar Mountains WSA

Initial scoping activities, the WAR, and public comments on the Draft EA identified three issues for the Cedar Mountains WSA: the quality of the area's wilderness characteristics, the significance of manageability conflicts, and the significance of the area's ecological supplemental values. BLM resource specialists identified the quality of the wilderness values as the primary issue for the Cedar Mountains WSA.

Cooke's Range WSA

Wilderness values, special features, wilderness manageability conflicts, and mineral resource conflicts were the issues identified for the Cooke's Range WSA in the initial scoping activities, the WAR, and the public comments on the Draft EA. The Cooke's Range WSA has scenic, cultural, historical, and ecological special features. Manageability conflicts affecting the WSA include cherry-stemmed roads and rangeland developments, land status patterns and boundary configuration, and existing mining claims. The area was identified as having high potential for strategic minerals. The issues were raised by members of the public favoring wilderness designation as well as those in opposition to wilderness designation. These issues were generally discussed in terms of the value of the area for wilderness versus the value of the area for mineral resources.

Cowboy Spring WSA

The issues identified for this WSA in the initial scoping activities, the WAR, and the Draft EA were the quality of the area's outstanding opportunities for solitude and primitive recreation, potential manageability as wilderness, and the area's ecological values. The degree to which the WSA's size and topography and the surrounding non-Federal lands affect the quality of opportunities for solitude and primitive recreation are the basic concerns for the quality of wilderness values issue and the manageability issue. The significance of the area's plant and animal habitats and the appropriateness of some form of special designation are the crux of the ecological values issue.

Florida Mountains WSA

Three issues of concern were identified for the Florida Mountains WSA; mineral potential, the quality of the WSA's wilderness values, and manageability. Base and precious metals have been mined intermittently in the Florida Mountains since about 1880. Minerals recovered include gold, silver, lead, zinc, copper, and manganese. Concerns regarding mineral potential include restrictions to mineral development under wilderness designation and the possibility that mineral deposits in the Florida Mountains are not economically exploitable.

The second issue is the quality of the WSA's wilderness values. Those favoring wilderness designation for the WSA state the area has high quality wilderness and supplemental values. Those opposed to wilderness designation felt the area's wilderness values have been degraded by past mining activity, cherry-stemmed vehicle routes, and rangeland developments.

Concerns over the area's manageability relate to land status and boundary configuration, existing mining claims, and mineral potential.

Gila Lower Box WSA

Issues of concern identified in initial scoping activities for the Gila Lower Box WSA were the quality of the wilderness values and the significance and quality of the area's special features. The area's special features include cultural, scenic, and wildlife values, threatened or endangered species, and riparian habitat.

Additional issues identified in public comments on the Draft EA included: wilderness designation versus management as an Area of Critical Environmental Concern (ACEC), designation of the entire WSA versus designation of a portion of the area, and the possibility that further exploration in the future could result in the discovery of mineral resources.

Las Uvas Mountains WSA

Initial scoping activities, the WAR, and public comments on the Draft EA identified the quality of wilderness values as the primary issue for the Las Uvas Mountains WSA. The impact of the cherry-stemmed Rustler Fire Trail and land status on manageability was identified as an issue of less significance.

Organ Mountains WSA

Primary issues identified for the Organ Mountains WSA in the initial scoping activities, the WAR, and public comments on the Draft EA included: the quality of the area's wilderness values, special features, potential wilderness manageability, and the area's high potential for strategic mineral resources. Scenic values and ecological values of scientific and educational interest were identified as were positive and negative factors affecting the manageability of the Organ Mountains WSA as wilderness. These issues were raised by members of the public in favor of wilderness designation for the Organ Mountains as well as those in opposition. Like the Cooke's Range WSA, these issues were generally

discussed in terms of the value of the Organ Mountains for wilderness versus the value of the area's mineral resources.

Another issue of concern for the Organ Mountains is the need for wilderness areas near population centers.

Robledo Mountains

Issues identified in the initial scoping activities for the Robledo Mountains WSA were the quality of the area's wilderness values and the potential for managing the area as wilderness. Geothermal potential, locatable minerals potential, and the quality and significance of the WSA's special features were issues identified during the preparation of the WAR and the public review of the Draft EA.

West Potrillo Mountains and Mount Riley WSAs

Initial scoping activities, the WAR, and public comments on the Draft EA identified the quality of wilderness values and manageability as the primary issues for these two WSAs. High quality wilderness values were attributed to the area's large size, diverse topography, proximity to large population centers, and dispersed access points. Opposition to wilderness designation listed roads, rangeland developments, and vehicle trails as impacts on wilderness, and described opportunities for solitude as less than outstanding due to the outside sights and sounds of the nearby Southern Pacific Railroad, Interstate 10, and the low level training flights of military aircraft.

Manageability concerns associated with wilderness designation included State land inholdings, a private subsurface mineral estate inholding, cinder mining activities, and existing off-road vehicle use patterns. Possible conflicts associated with potential oil and gas and geothermal energy resources were also initially issues of concern.

Socorro Resource Area

Antelope WSA

The primary issue identified for the Antelope WSA was the quality of the area's wilderness values. Those opposed to wilderness designation felt the area's unvaried topography and lack of recreation resources did not meet the criteria for a wilderness area. Others oppose wilderness designation for the WSA because of possible impacts to ranching operations and the WSA's location within the White Sands Missile Range's (WSMR) Aerobee 350 Safety Evacuation Zone. Supporters of wilderness designation cite the WSA's proximity and similarity to the U.S. Fish and Wildlife Service Little San Pasqual Wilderness and the opportunity to preserve additional desert grasslands as evidence of the area's wilderness suitability for designation.

Continental Divide WSA

The Continental Divide WSA generated a great deal of public input during wilderness studies. Mineral potential and the quality of the WSA's wilderness and supplemental values were the primary issues identified.

Individuals opposed to wilderness designation of the area cite the moderate potential for the discovery of tin deposits and possible impacts to ranch operations as reasons for a nonsuitable recommendation.

Individuals who supported wilderness designation cite the WSA's high wilderness values, diverse landforms, and the opportunity to preserve substantial areas of grasslands as reasons for a suitable recommendation.

Devil's Backbone WSA

The primary issue identified for the Devil's Backbone WSA was the area's wilderness values. Those supporting wilderness designation felt the area's naturalness, solitude, and wildlife values support wilderness designation. Those opposed to wilderness designation felt the WSA's wilderness values were not of a high quality and expressed concern over possible restrictions to ranch operations.

Eagle Peak WSA and Mesita Blanca WSA

Because of the distance from population centers and the public's lack of familiarity with the area, little public interest has been demonstrated over these WSAs. Consequently, the issues and concerns have been identified primarily by BLM resource specialists.

Under wilderness, concerns exist over possible manageability problems associated with access and development of split-estate inholdings. Under No Wilderness, impacts to cultural resources, including possible Chacoan outliers, are a concern.

Horse Mountain WSA

Horse Mountain has been a relatively noncontroversial WSA. The primary issue has been the WSA's wilderness values. Public comments have addressed different aspects of the WSA's size, naturalness, scenic and recreational resources, and its biological diversity. Of secondary importance have been discussions concerning the lack of or the potential for resource conflicts.

Jornada del Muerto WSA

This WSA has been relatively controversial. The primary issue has been the WSA's wilderness values. Some support the WSA for wilderness designation because of the area's naturalness, size, solitude, and opportunities for recreation. Of secondary importance to this group is the lack of resource conflicts. Others oppose wilderness designation for the WSA because of possible impacts to ranching operations and the WSA's location with the WSMR Aerobee 350 Safety Evacuation Zone.

Presilla WSA

The primary issues identified for this WSA were the quality of the area's wilderness values and the area's special features. Mining activity and post-Federal Land Policy and Management Act road construction have affected the area's naturalness and the BLM's ability to manage the area as

wilderness. Under nonwilderness management, concerns exist over management of the area's cultural, recreation, and visual resources. In addition, part of the Presilla WSA is within the WSMR Safety Extension Area.

Sierra de las Canas WSA

The primary issue for the Sierra de las Canas WSA has been the quality of the area's wilderness values. Secondary issues are potential impacts to the WSMR Safety Extension Area and concerns about potential impacts to ranch operations and access to a private inholding.

Sierra Ladrones WSA

The quality of the WSA's wilderness values and potential resource conflicts are the primary issues for this WSA. The Sierra Ladrones have a history of public support for wilderness designation. Supporters of wilderness designation cite the area's size and outstanding recreation, scenic, wildlife, and ecological values as reasons for a protective designation. Opposition to wilderness designation has centered largely on the concern over possible restrictions to mining and secondly, on the possibility of impacts to ranching.

Stallion WSA

The quality of the Stallion WSA's wilderness values and potential impacts to the WSMR Safety Extension Area were the primary issues for this WSA. Existing military support facilities impact the WSA's existing apparent naturalness. Concern exists that wilderness designation could impact future expansion of existing military facilities.

Veranito WSA

The primary issue for the Veranito WSA has been the quality of the area's wilderness values. Existing rangeland developments diminish the area's apparent naturalness. The WSA lacks outstanding opportunities for primitive or unconfined recreation. Of special interest is the future management of a cottonwood bosque in the WSA.

White Sands Resource Area

Brokeoff Mountains WSA

The primary issue for the Brokeoff Mountains WSA is the quality of the area's wilderness values, the WSA's proximity to the Guadalupe National Park, and potential resource conflicts. Supporters of wilderness designation cite the WSA's proximity to the National Park and the area's size and naturalness as reasons for a protective designation. Opposition to wilderness designation has centered on the area's potential for oil and gas development, potential impacts to ranching operations, and the impacts of existing developments on the WSA's apparent naturalness.

PUBLIC REVIEW OF THE DRAFT DOCUMENTS

The Draft Environmental Assessment Wilderness Study Areas in the Las Cruces District (BLM 1983) and the Socorro District Wilderness Draft

Environmental Assessment (BLM 1983) were made available to the public and the comment period began on March 30, 1983. The public comment period for these documents was originally scheduled to end on May 31, 1983; however, in response to public demand, the comment period was extended to June 30, 1983.

The New Mexico Supplemental Draft Environmental Assessment (BLM 1983) was released to the public on August 12, 1983. Due to printing delays, the last day of the public comment period was extended from September 30, 1983 to October 14, 1983.

The Las Cruces District Wilderness Supplemental Draft Environmental Assessment (BLM 1984) was made available to the public on May 16, 1984. The last day of the public comment period was originally scheduled for June 16, 1984; however, the comment period was extended to July 2, 1984.

News releases and notices in the Las Cruces District newsletter announced the availability of the various draft documents. In addition, several feature articles on the Las Cruces District's wilderness review appeared in the Las Cruces Sun News, Albuquerque Journal, and Deming Headlight.

In addition to all grazing permittees within WSAs and other interested individuals on the Las Cruces District's wilderness mailing list, the following agencies, organizations, and interest groups were sent copies of the draft documents (an asterisk indicates those who responded to any of the draft documents):

Congressional Delegation and New Mexico State Legislators

U.S. Senator Bill Richardson
State Senator Joseph A. Fidel
State Representative James L. Martin

New Mexico State Agencies

*Agriculture Department
*Bureau of Mines and Mineral Resources
Commerce and Industry Department
*Department of Finance and Administration
Office of Cultural Affairs
*Museum of New Mexico
*Historic Preservation Division
*State Planning Division
*Department of Game and Fish
Energy and Minerals Department
Governor's Office
Health and Environment Department
Environmental Improvement Division
Highway Department
Human Services Department
Office of Indian Affairs
Land Office
*Commissioner's Office

New Mexico State Agencies (continued)

*Natural Resources Department
Forestry Division
Parks and Recreation Division
*Administrative Services Division--Heritage Section
Taxation and Revenue Department
Transportation Department

Federal Agencies

Department of Agriculture
Agricultural Stabilization and Conservation Service
Farmer's Home Administration
*Forest Service
Science and Education Administration
Jornada Experimental Range
*Soil and Conservation Service
Department of Commerce
Department of Defense
*Department of the Air Force
Department of the Army
Corps of Engineers
*White Sands Missile Range
Department of Energy
Department of the Interior
Advisory Council on Historic Preservation
*Bureau of Indian Affairs
*Bureau of Mines
Bureau of Mining Inspection
*Bureau of Reclamation
*Fish and Wildlife Service
Geological Survey
*National Park Service
Natural Resources Library
Office of Environmental Project Review
*Office of Surface Mining
Department of Housing and Urban Development
Department of Transportation
*Environmental Protection Agency
Federal Highway Administration
General Accounting Office

Local and Regional Governments, Agencies, and Indian Tribes

Alamogordo Chamber of Commerce
Alamo Navajo Reservation
Catron County Commissioners
City of Las Cruces
Council of Energy Resources Tribes
Dona Ana County Planning
Dona Ana County Road Department
El Paso Chamber of Commerce
Hub Resource Conservation and Development Council

Local and Regional Governments, Agencies, and Indian Tribes (continued)

Jornada Resource Conservation and Development Council
Luna County Planning Commission
Middle Rio Grande Council of Governments
Navajo Nation Office of Program Development
Otero Board of County Commissioners
Pueblo of Acoma
Pueblo of Isleta
Pueblo of Laguna
*Pueblo of Zuni
Quemado Soil and Water Conservation District
Resource Conservation and Development Council, Las Cruces
Salado Soil and Water Conservation District
San Francisco Soil and Water Conservation District
Sierra County Commissioners
Socorro County Manager
Socorro Soil and Water Conservation District
Southeast New Mexico Economic Development District
Southern Rio Grande Council of Governments
*Southwest New Mexico Council of Governments
Southwest New Mexico Resource Conservation and Development Council
Torrance County Commissioners
Valencia County Commissioners

Livestock Related Organizations

Dona Ana Farm and Livestock Bureau
Grant County Farm and Livestock Bureau
Hidalgo County Farm and Livestock Bureau
Las Cruces District Grazing Advisory Board
Luna County Farm and Livestock Bureau
New Mexico Cattle Growers Association
New Mexico Farm and Livestock Bureau
New Mexico Woolgrowers Association
Otero County Farm and Livestock Bureau
Sierra County Farm and Livestock Bureau
Southwest Livestock Grazing Association
West Central Grazing Permittee Association

Professional Societies

New Mexico Wildlife Society
Society of Range Management
New Mexico Chapter

Conservation Organizations

*Albuquerque Wildlife Federation
American Horse Protection Association
American Wilderness Alliance
Arizona Natural Resources Conservation District
Cave Resources Foundation
Center for Urban Affairs

Conservation Organizations (continued)

*Continental Divide Trail Society
*Earth First!
*Desert Wilderness Coalition
*El Paso Wilderness Preservation Committee
Four Corners Wilderness Workshop
*Gila Wilderness Committee
Izaak Walton League
John Muir Institute
*Mesilla Valley Audubon Society
National Audubon Society
National Council of Public Land Users
National Geographic Society
National Wildlife Federation
Natural Resources Defense Council
*New Mexico BLM Wilderness Coalition
New Mexico Citizens for Clean Air and Water
New Mexico Conservation Coordinating Council
*New Mexico Natural History Institute
*New Mexico Wilderness Study Committee
New Mexico Wildlife Federation
Oregon Environmental Council
Public Lands Council
Public Lands Institute
*Scenic Lands Foundation
Sierra Club
    *El Paso Regional Group
    *Rio Grande Chapter
    *Southwestern New Mexico Group
Southwestern New Mexico Audubon Society
Southwest Research and Information Center
*The Nature Conservancy
*Wildlife Management Institute
*Wilderness Society
Wilderness Park Museum

Industry Organizations

American Mining Congress
American Petroleum Institute
Independent Petroleum Association of America
New Mexico Mining Association
*Minerals Exploration Coalition
*New Mexico Oil and Gas Association

Mining, Petroleum, and Geophysical Exploration Companies

Amax Exploration Company
American Uranium Corporation
Amoco Production Company
Anaconda Minerals Company
Arch Mineral Corporation
*Asarco Incorporated

Mining, Petroleum, and Geophysical Exploration Companies (continued)

*Asarco Rocky Mountain Exploration Division
*Atlantic Richfield Company
Beard Oil Company
Certified Sand Company, Incorporated
Chevron Pipeline Company
*Chevron USA, Incorporated
*Chino Mines
Consolidation Coal Company
*Cougar Fluorspar Corporation
Dorado Energy Group
Energy Resources Exploration
Exxon Company USA
Geotronics Corporation
Getty Oil Company
Gulf Mineral Resources Company
Gulf Oil Company
Hanna Mining Company
*Harper Oil Company
Houston International Minerals Corporation
Hunt Energy Corporation
KCC Mining
*Kerr McGee Corporation
Kiewitt Mining and Engineering
Leonard Minerals Company
Marathon Oil Company
Marshall R. Young Oil Company
May Petroleum Incorporated
Missing Link Mining Company, Incorporated
Mobile Producing Texas and New Mexico
*Molycorp, Incorporated
*Phelps Dodge
Placid Oil Company
Santa Fe Mining, Incorporated
Sohio National Resources Company
*Sunbelt Mining Company, Incorporated
Teledyne Exploration
Teton Exploration Drilling Company, Incorporated
*Texaco, Incorporated
Texas Oil and Gas Corporation
Turquite Minerals
*UNC Mining and Milling
Union Oil Company of California
United Nuclear Uranium Exploration Company
Utility Fuels, Incorporated
Western Oil Company
Yates Petroleum Corporation

Other Groups

Arizona Association of 4-Wheel Drive Clubs
Butterfield Trail 4x4 Club
Deming Gem and Minerals Society

Other Groups (continued)

Dona Ana Rockhound Club
El Paso 4x4 Club
Las Cruces Four Wheelers
Las Cruces Jeep Club
New Mexico Motorcycle Dealers Association
New Mexico Trappers Association
Sierra Outfitters and Guides
University of New Mexico Mountaineering Club
White Water Odyssey

Universities and Libraries

Albuquerque City Library
Chapparal Northwestern University
Clarkson College
Native American Resource Library
*New Mexico Institute of Mining Technology
*New Mexico State University
    *Range Improvement Task Force
Northern Arizona University
Purdue University
Rand McNally Company Map Library
Santa Fe Public Library
Socorro Public Library
*Southern Illinois University
Thomas Branigan Memorial Library
Truth or Consequences Public Library
University of Arizona
University of California
University of New Mexico
University of Pittsburgh

COMMENTS AND RESPONSES

During the comment periods on the four draft documents, a total of 728 comments were received. Substantive comments on specific WSAs are discussed and responded to in Chapter V, Public Involvement Overview, of the appropriate WAR. Substantive comments were considered to be those comments which addressed the adequacy or accuracy of the information and alternatives presented in the draft documents and WARs.

A number of general topics were discussed repeatedly in the public comments on all four draft documents. These topics were in reference to all of the WSAs or a group of WSAs and are briefly discussed below.

Many pro-wilderness comments stated that the BLM should have considered land exchanges or direct acquisition of non-Federal inholdings to enhance the manageability and wilderness values of the WSAs. The BLM did not initiate negotiations for land exchanges or acquisition with the State of New Mexico or private landowners during the wilderness study and preparation of the draft WARs because a WSA recommended suitable for wilderness designation must have quality wilderness values and be manageable

based on its own merits. The BLM did not study the suitability of non-Federal lands for wilderness designation. The suitability of a BLM WSA for designation should not be dependent upon acquiring non-Federal lands since acquisition at this time cannot be guaranteed. However, the final WARs for areas recommended suitable for wilderness designation do indicate that certain non-Federal lands should have priority for acquisition because they would enhance the manageability of the designated wilderness. The State Land Office's comments on the Socorro District Wilderness Draft Environmental Assessment (BLM 1983) recommended that BLM and the State Land Office actively pursue a land exchange program that would result in BLM acquiring certain state land inholdings prior to wilderness designation. In response, the Las Cruces District compiled a list of state lands, in priority order, that the BLM would like to acquire.

Numerous comments also noted BLM's failure to analyze the need for designated wilderness near the population centers of the Southwest and the value of WSAs like those in the Las Cruces District in terms of adding ecosystem diversity to the National Wilderness Preservation System. This type of information is documented for each WSA in Chapter IV of the WARs and will be analyzed in the BLM New Mexico Statewide Wilderness Environmental Impact Statement (EIS). The EIS will analyze individual BLM wilderness recommendations in the broader context of other Federal lands already designated or to be recommended as wilderness. The analysis will be based on three factors: (1) expanding the diversity of natural systems and features, as represented by ecosystems and landforms; (2) opportunities for solitude or primitive recreation within a day's drive (5 hours) of major population centers; and (3) balancing the geographic distribution of wilderness areas.

Several commentators raised questions concerning the level of detail and reliability of the cultural resources information presented in the Draft EAs and WARs, the impacts of wilderness designation on cultural resources, and the requirements for consultation with the New Mexico State Historic Preservation Officer.

All of the WSAs in the Las Cruces District are within areas covered by various Class I cultural resources inventories. A Class I inventory is derived from existing information and provides a narrative overview of the cultural resources and a compilation and maps of recorded sites within a generally large area, such as a Resource Area.

In addition, the Continental Divide, Eagle Peak, and Mesita Blanca WSAs in the Socorro Resource Area are within an area where a Class II Sampling Field Inventory was conducted in 1979. This Class II inventory was designed on the basis of a random 10 percent sample stratified on soil associations. Class II inventories allow an objective estimate of the nature and distribution of cultural resources within a given area.

BLM records were also checked for Class III inventory data on discrete areas within or near the WSAs. Class III inventories are intensive field inventories designed to locate and record all cultural resources sites within small project areas such as livestock waters or seismograph lines.

Using the above information, BLM archaeologists were able to provide an evaluation of the probability of undiscovered cultural sites, an estimate of site density, and the significance of the cultural resources within some of the WSAs. References in the WAR and EA tables to "no inventory data" or "WSA uninventoried" refers to the lack of intensive field inventories designed to locate and record all cultural resource sites within the WSA.

Based on existing information, it appears that wilderness designation would have no significant impacts on cultural resources. The State Historic Preservation Officer's (SHPO) comments indicate agreement with this assessment. Overall, the potential for vandalism of sites would decrease because of the prohibition of motorized access and because monitoring of cultural resource sites would probably be enhanced in a designated wilderness. Stabilization, excavation, and research may be permitted by the State Director on sites within designated wilderness on a case-by-case basis where the project will not degrade the overall wilderness character of the area and such activity is needed to preserve the particular resource.

Since the recommended actions presented in the draft documents do not represent definite proposals involving surface disturbing activities, formal consultation with the SHPO is not required at this time. However, BLM has informally consulted with the SHPO throughout the wilderness study process and sent copies of all of the draft documents for review.

Numerous comments questioned BLM's treatment of the mineral resources potential of the WSAs. Pro-wilderness commentators felt that BLM made arbitrary value judgments regarding the relative value of known or potential mineral resources in the WSAs versus the value of wilderness protection and that these arbitrary judgments prejudiced the recommendations for many of the WSAs. On the other hand, the comments of mining and mineral exploration companies and organizations proposed that "all areas with mineral and energy potential should be excluded from wilderness designation even though no presently economic deposit is now known" because designated wilderness areas will be withdrawn from appropriation under the mining and leasing laws.

The BLM is conducting wilderness studies in accordance with the BLM planning regulations (43 CFR Part 1601) which establish the basic process for reaching multiple-use planning decisions on public land. The BLM's land-use planning process requires consideration of all the resources and potential uses for each land area; in this case, each WSA. Determining an area's suitability or nonsuitability for preservation as wilderness means determining whether the area is more suitable for wilderness designation or more suitable for other uses. The process inherently requires that BLM managers make a judgment, based on data presented in the WARs, regarding the value of resources protected under wilderness designation versus the value of resources, such as minerals, that would be forgone or unexploitable under wilderness designation.

Comments from the New Mexico State Department of Agriculture indicated that recommendations to designate certain WSAs or portions of WSAs as wilderness may conflict with the objectives for livestock management

outlined in the West Socorro Rangeland Management Program Environmental Impact Statement (BLM 1982) and East Socorro Grazing Environmental Impact Statement (BLM 1979). The comments also stated that proposals for rangeland improvements in the Sierra Ladrones and Sierra de las Canas WSAs had been presented to the Socorro District Grazing Advisory Board.

All completed Grazing Environmental Impact Statements/Rangeland Program Summaries, Allotment Management Plans, and Range Improvement Justification Plans for grazing allotments within or partially within WSAs were checked for rangeland developments or treatments proposed within WSAs. These proposals are documented in Chapter III, Livestock Grazing, of the WARs. Using the Wilderness Management Policy (BLM 1981) as the basis for future wilderness management, the general impacts of wilderness designation on these proposals was analyzed in Chapter VI, Alternatives and Impacts. The Bureau recognizes that additional proposals may be brought forward for certain allotments in the future; however, without specific proposals and locations, it is impossible to analyze the degree of conflict between such projects and wilderness management.

Comments submitted by the Department of the Army noted that the Antelope and Jornada del Muerto WSAs are contiguous to the western boundary of the White Sands Missile Range (WSMR) within the Aerobee 350 Safety Evacuation Zone. The Presilla, Sierra de las Canas, and Stallion WSAs are within the Range Safety Extension Area adjacent to the north boundary of WSMR. These areas are evacuated periodically during missile firings to preclude hazards in the event of a missile impact.

It is the Department of the Army's view that designation of these areas as wilderness could affect the WSMR's testing capability unless an agreement with the BLM could be reached whereby the Army would have unrestricted motorized access into these areas to recover missile hardware as well as entry to survey and locate instrumentation and missile tracking equipment. The Army indicated that they would also require certification by the BLM that no inhabitants are in these areas during periods of evacuation. The BLM recognizes that the Army's concerns are legitimate and the impacts of wilderness designation on the Army's operations have been clarified in the WARs. Should any of these areas be designated wilderness, the Army's concerns would most likely be addressed in the authorizing legislation and certainly in the area-specific Wilderness Management Plan.

The three areas covered in the Las Cruces District Wilderness Supplemental Draft Environmental Assessment (BLM 1984) (Florida Mountains, Antelope, and Presilla) were identified by the BLM in the November 1980 New Mexico Wilderness Study Area Decisions as intensive inventory units lacking the requisite characteristics for designation as WSAs. These three areas were to be released from further wilderness review. Various publics subsequently appealed the BLM's decisions on the three areas to the Interior Board of Land Appeals (IBLA). The IBLA reversed the BLM's decisions on the Antelope and Presilla areas because BLM did not follow proper wilderness inventory procedures, and the areas were designated WSAs. The IBLA remanded the decision on the Florida Mountains and directed BLM to reinventory the area for wilderness characteristics because there was sufficient doubt regarding BLM's assessment of the area's naturalness.

A number of the public comments received on the Las Cruces District Wilderness Supplemental Draft Environmental Assessment indicated that the Draft EA and WARs were inadequate because they did not address the issues raised by the IBLA in their review of the appeals described above. The appeals on these areas were appeals of BLM's wilderness intensive inventory decisions for these areas. The IBLA's review was limited to a review of the inventory procedures followed by the BLM. Since the Antelope and Presilla decisions were reversed by the IBLA and the areas designated WSAs, there was not requirement or need for BLM to respond to issues raised by the IBLA decision. In the case of the Florida Mountains, BLM reevaluated the area's naturalness, amended the intensive inventory report, and prepared a Reassessment of the Wilderness Inventory Decision for the Area Manager's, District Manager's, and State Director's signatures. After designation as WSAs, wilderness studies of these areas were conducted in accordance with the Wilderness Study Policy; Policies, Criteria, and Guidelines for Conducting Wilderness Studies on the Public Lands (BLM 1982).

LIST OF PREPARERS

A list of persons involved in the preparation of the WARs and EAs is provided in Table 5-1.

TABLE 5-1
LIST OF PREPARERS

Name	WAR/EA Responsibility	Education	Experience
		CORE TEAM	
Jeff Jarvis	Team Leader	B.S., Natural Resources Ohio State University	BLM 5 yrs. - Outdoor Recreation Planner District Outdoor Recreation Planner NPS 2 yrs. - Park Ranger FWS 9 mos. - Work Coordinator (Youth Program)
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Gerald Sanchez, District Regional Economist
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TABLE 5-1 (concluded)
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